

Obituary.

Sir David Gill.

By the death of Sir David Gill, which occurred on 24th January, we lose our greatest living astronomer and a scientist of world-wide reputation. He was born at Aberdeen on 12th June 1843, and educated at Marischal College and the University of Aberdeen. A small observatory belonging to the University afforded him his first opportunity of becoming familiar with the practical work of astronomical observation. In 1873 he undertook the directorship of the private observatory belonging to Lord Lindsay (afterwards Earl of Crawford) at Dunecht. In this capacity he organised Lord Lindsay's expedition to Mauritius to observe the Transit of Venus of 1874, and in connection with this work made a series of longitude determinations. He also

on this occasion measured the base line for the geodetic survey of Egypt, near Cairo. He resigned his position at Dunecht in 1876, in order to be at liberty to carry out an expedition to Ascension in 1877 for the determination of the solar parallax by heliometer observations of Mars. This expedition was, as every astronomer knows, eminently successful, and testified to the great value of the heliometer as a measuring instrument when in skilful hands. Gill's reputation as a practical astronomer of energy and resource was now established, and when in 1879 he was appointed H.M. Astronomer at the Cape it was generally felt that he would prove a success in his new sphere of labour. Never was expectation better fulfilled. From the first day of his arrival at the Cape to the resignation of his office in 1907 a continuous stream of astronomical work of the highest character and interest emanated from the Cape Observatory. The most refined heliometer work, resulting in determinations of the distances of the Sun and of a select list of stars, was a notable feature in Gill's programme. Then there was the application of photography to star charting, and the subsequent Photographic Durchmusterung and the International Astrographic Chart and Catalogue. Meridian work, too, of the most refined order, and latterly undertaken with an improved instrument with the most up-to-date accessories, enabled the Cape Observatory to issue star catalogues second to none in importance and accuracy. The Department of Astrophysics was successfully launched on its career under Gill's superintendence, when McClean's gift of the Victoria telescope to the Observatory afforded the opportunity for this further development. The spectroscopic survey of the southern heavens and the measurement of the radial velocities of southern stars filled a long-outstanding gap in our astronomical records. But perhaps Gill's name is better known to the general public for his geodetical work rather than for his more strictly astronomical labours. As mentioned above, in the early part of his career he measured the base line for the Egyptian Survey. This was his first preliminary step towards the accomplishment of measuring the Great African Arc on the 30th meridian, which it was a dream of his life to see completed. He organised and completed the geodetic survey of Cape Colony and Natal, and he lived to see the work of the measurement of the arc being carried on through the Congo Free State and through German East Africa towards the Sudan. The goal of his ambition was to see this African Arc joined on to that of Greece and Struve's Great Arc, which terminates at the North Cape, and so to exhibit an arc of 105 degrees on the Earth's surface measured with the greatest attainable accuracy. For the carrying out of the southern section of this great work the civilised world will be indebted mainly to Sir David Gill.

Honours, of course, crowded thick upon him, with the cordial approbation of his fellow-scientists. He was created C.B. in 1896 and K.C.B. in 1900. The present writer happened to be in Paris in 1896 with Gill—engaged on a scientific mission—at the time when the news arrived of his selection for the distinction of C.B. He well remembers the chorus of approval with

which the announcement was received by the astronomers of various nations who were assembled on the occasion. Even the grim-faced Newcomb relaxed into temporary geniality! Gill had the almost unique distinction of having been twice awarded the Gold Medal of the Royal Astronomical Society, of which he was President during the years 1909-11 and Foreign Secretary at the time of his death. He was also a Fellow and Royal Medallist of the Royal Society and was President of the British Association in 1907. He received a very large number of foreign distinctions. Since his retirement from the Cape Observatory in 1907 he had by no means relaxed his activities. He was assiduous in his attendance at Council and Committee meetings, and in assisting with his advice those astronomers who were engaged in the arduous task of planning new instruments. The present writer received a letter from him shortly before he was taken ill in December, in which he enumerated the various jobs on which he was then engaged, and declared that he was busier than he had been when at the Cape. Fortunately he lived to complete and publish his *History and Description of the Royal Observatory, Cape of Good Hope* (*see Journal, Vol. XXIV., p. 130*), which is an invaluable record of the achievements of British astronomy. He had been a member of this Association since 1891, and had on two or three occasions given addresses at our meetings.
