

ANNUAL REPORT OF THE TRANSVAAL OBSERVATORY

1910

Director Mr. R.T.A. Innes

As the Transvaal Observatory now appears for the first time in the Society's Proceedings of Observatories, a few words on the history of its development may be given. Established in the year 1905, the Observatory was at first a purely meteorological one, and was entirely without any astronomical equipment until 1907. In September of that year a 9-inch refractor by Grubb was erected under the circumstances mentioned in the *Monthly Notices*, vol. lxxviii. page 32 of 1907 November. In 1908 the object glass was taken to Europe, and retouched and much improved by Sir Howard Grubb. In 1908 and 1909 this telescope was mainly employed in the discovery of double stars and observations of the phenomena of Jupiter's satellites. In 1909 the equipment was increased by the gift to the observatory from Mr. J. Franklin-Adams of his 10-inch triple O.G. Cooke Star-Camera, ~ which has a focal length of 45 inches. In the same year the Hon. J.B. Rissik (now Administrator for the Transvaal - then Minister for Lands) authorised the purchase of a 26-inch refracting telescope, for which a contract has been placed with Sir Howard Grubb. In 1906 Dr. Oskar Backlund was good enough to lend the observatory a universal instrument (2 5/8-inch object glass) by Bamberg, to be used for observations of latitude.

Sir David Gill, who is supervising the construction of the 26-inch refractor, reports good progress with the mechanical parts and the delivery of the Repsold micrometer, but, so far, M. Mantois has not succeeded in casting suitable discs for the object-glass. The building for the telescope is now ready for the dome and floor.

The Franklin-Adams Star-Camera has been engaged during the greater part of the year in completing the charts of the southern hemisphere required by Mr. Franklin-Adams, and for this purpose has been in the hands of his Assistant, Mr. R.J. Mitchell. During its apparition a series of photographs of Halley's comet was taken by Mr. H.E. Wood, 50 plates being secured.

The 9-inch refractor has again been used for observing the phenomena of Jupiter's satellites and the discovery of double stars - the number of the latter discovered with this telescope now exceeds 600; and by Mr. W.M. Worssell for variable stars which are too faint for his own 4-inch refractor. Numerous drawings of the nucleus of Halley's Comet were made with this telescope.

Observations for the variation of latitude with the Russian instrument were commenced in March under the auspices of the *Central Bureau der Internationalen Erdmessung*, which supplies the star-places and reductions to date. The Bureau shares in

the cost of the work here.

In 1910 it was determined to issue circulars containing the results of the observations made. The informal nature of these circulars lends itself to easy and early publication. So far, five circulars have been issued, and a sixth is in the Government printer's hands.

Besides the astronomical work, the staff undertakes time-service and meteorological and seismological observations.