many different points of view, and those who wish to make propaganda on the subject should be careful to make it clear what their grounds are. decisions affecting science involve extra-scientific considerations, scientific research should continue to be based in the universities and not in government establishments, for in the universities it is easier for the scientific worker to maintain contact with specialists in other disciplines.

In discussion, Dr. E. V. Rowsell spoke of the scientific workers' responsibility to make public the potential consequences of their discoveries. have no right to put such scientific discoveries as nuclear fission into the hands of governments without explaining to the layman what is involved. He contended that, if the public had fully realized the implications of the use of the atomic bomb, they would not have permitted it to be used, even to end the war with Japan. Prof. D. H. Peacock urged men of science to tolerate religion even if they do not themselves subscribe to it: religion might be as good an ethical basis for science as any of the alternatives that have been put forward.

Summing up the last session, Prof. Mott agreed that the special responsibility of the man of science lies in disseminating the consequences of scientific progress, while Prof. Coulson urged a search for a basis of agreement, for example, between religion and Marxism. True science, he said, is itself a religious activity, and religion and science are facets of something greater than either.

A. F. Brown A. R. TRIM

ASTRONOMY AT THE CAPE OF GOOD HOPE

ANNUAL REPORT FOR 1950

HE Report for 1950 of H.M. Astronomer at the Cape of Good Hope, Dr. R. H. Hoy, to the Secretary of the Admiralty has recently been published*. The report commences with a description of the buildings and grounds; certain modernizations of the residences have been undertaken and work on an improved water supply to the offices and residences has been started. Minor repairs were made to the dome of the Tower telescope and an improved gear fitted; leaks in the dome of the Victoria telescope can be repaired, but it is necessary to re cover the astrographic dome with 'Masonite', owing to its age and general condition. An account of the alterations to and use of the nine instruments follows, and in some cases there have been delays in adapting them to the scheduled programmes. Thus, while the modernization of the reversible transit circle went on throughout 1950, it was impossible to bring it back into routine use during the year, though it had been hoped that it would be in a fit state to start the new observing programme during the first half of 1951. The photometric cameras were received back from the Cambridge Observatory early in 1950; but they will probably remain unmounted until after the reversible transit circle is in active commission. The old gravity-driven clock for the Victoria telescope has been replaced by a small electric synchronous motor:

the new compound cell for the 24-in. lens has been received from Messrs. Cox, Hargreaves and Thompson, Ltd.; but it has not yet been fitted. The Airy transit circle, which was used chiefly for making differential observations, has been dismantled as the observations can be made more accurately and more conveniently by the reversible transit circle.

Under "Astronomical Observations and Reductions" are included meridian observations, photographic star positions and proper motions, and stellar photometry, with seven subdivisions. An interesting matter arises under "Occultations" in connexion with the occultations of Antares in May and June. This star is one of the few occulted that can be expected to show a measurable diameter, and preparations were made at the Radcliffe and Cape Observatories to observe the May and June occultations photoelectrically with the object of measuring the durations of the occultations and from these deducing the apparent diameter of the star. Successful observations indicated a diameter of 0.04", and it was realized that it would be a simple matter to time ordinary occultations to an accuracy of 0.01 sec. with a slight modification of this photoelectric apparatus. Arrangements have already been made for this, and it is hoped that occultations will be timed photoelectrically in the routine work. It may be pointed out that a photomultiplier photoelectric photometer has been in use for some time with the 15-in. reflector at Dunsink Observatory, and an occultation can be timed with an accuracy of one-hundredth of a second

by this method (see *Irish Astro. J.*, 1, No. 6; 1951). Other matters referred to in the Report are the time service, meteorological observations, publication of results and personal establishment. The lastnamed concludes with an account of the work of Dr. J. Jackson, who succeeded Sir Harold Spencer Jones at the Cape in March 1933, and who retired at the end of July 1950. This account pays tribute to Dr. Jackson's devotion to the parallax work in particular; during the Second World War, when many of the staff were absent on war duties, he personally made a large proportion of the necessary observations; and after the War, when the Observatory was fully staffed, he continued to observe up to the time of his retirement, especially on the photometry of the parallax stars. On relinquishing his appointment he was made a C.B.E.

THE QUAIL IN BRITAIN

'HE widespread impression that, in the British I Isles, the quail used to be more a resident and less of a summer migrant is probably fallacious. There are still records of quail here every winter, and there is no evidence that the proportion of winter birds to summer birds is less than it ever was in the past. This and other problems of the biology of the quail have recently been discussed by R. E. Moreau (British Birds, 44, No. 8, 257, August 1951).

Unlike the other game-birds, the quail is not represented by archæological or fossil material in the British Isles and there is no mention of it before the twelfth century. Evidently the bird never established itself here in the affections of the common people, as it did in Germany, where it was a cherished songster and unrestrained household pet. Nor in Great Britain or Ireland did the bird insinuate itself into proverbial sayings as it did in Germany, France and Italy. It

^{*} Report of H.M. Astronomer at the Cape of Good Hope to the Secretary of the Admiralty for the Year 1950. Pp. 15. (Cape of Good Hope: Royal Observatory, 1951.)