

Prof. E. W. Brown then formally moved a resolution which, amended by Dr Comrie as to tables, was seconded by Dr Brouwer, and reads as follows:

“This Committee recommends that Commission 7 be abolished, and that the subject of Astronomical Tables be taken over by Commission 4.”

This resolution was carried unanimously.

#### *Commission 8. (MERIDIAN ASTRONOMY.)*

PRESIDENT: Sir Frank Dyson.

SECRETARY: Dr J. H. Oort.

In connection with the plans of the Pulkovo Observatory for removing one of their vertical circles to the southern hemisphere the following recommendation was proposed by Dr Morgan and seconded by Prof. Boss:

“The Commission regards the proposal of the Pulkovo Observatory to establish the Vertical Circle in as nearly equal a southern latitude as possible with great sympathy. We believe this will be of very great value in the improvement of fundamental declinations.”

Dr Lundmark read a report on the programmes for the Lund meridian circle, which programmes include stars of special interest, such as long- and short-period variables, extremely red non-variable stars, B-emission stars, moving clusters, nebulous stars, nuclei of planetary nebulae and of anagalactic objects, etc. The definite programme will contain at least 3000 stars, results for some 400 of which have already been obtained. It is planned to extend the observations to stars in the southern hemisphere as soon as financial conditions will permit the erection of a southern station.

The committee members present seemed generally to agree with the recommendations of the Draft Report about confining future observations by meridian circles to brighter stars. In this connection Dr Kopff remarked on the difficulties which were felt in the observation of the fainter Eros comparison stars. Schlesinger's method of using photographic plates with large fields is considered to be cheaper and more accurate.

With regard to comparison stars Schlesinger remarked that, if they were equally divided over the sky, the stars in the General Catalogue which was being constructed at the Dudley Observatory, would provide a sufficient number of comparison stars. As it is, the number is not sufficient in all parts of the sky and he therefore expressed the desirability of drawing up a list of supplementary stars (the requirement is between 16 and 25 comparison stars for each plate). Kopff remarks that a list of about 40,000 comparison stars, selected by Küstner, has already been observed six times. It would seem desirable to give preference to stars from this list and to the “*étoiles intermédiaires*” in the construction of the supplementary list proposed by Schlesinger. It would probably be possible to avoid faint stars. Dr Morgan provisionally offered the assistance of the Naval Observatory, Washington, for the observation of these supplementary stars.

As regards the photographic re-observation of the A.G. zones the observations are being made with a general co-operation scheme. The northern zones are being re-observed under the supervision of the A.G. In addition to several northern zones which have already been finished, the Yale Observatory is now undertaking the zones between  $0^{\circ}$  and  $-30^{\circ}$ , whereas the Cape Observatory is observing the zones

south of  $-30^\circ$  declination. With regard to the work at Yale Schlesinger remarked that the zone  $+20^\circ$  to  $+30^\circ$  which has just been finished has required many new experiments. It will be possible to finish future zones in about half the time.

The President proposed the nomination of a sub-committee for dealing with the re-observation by means of photography of the A.G. zones and the observations of standard stars for the reduction of the plates.

The sub-committee was constituted as follows:

Schlesinger, chairman; Boss, Jackson, Spencer Jones, Kopff, A. Lambert, Moreau and Morgan, members.

The following recommendation was proposed by Dr A. Lambert and approved by the Commission:

“La Commission prend en considération la proposition de M. Mineur, relative à l'étude des mouvements propres des étoiles éloignées de la galaxie; elle recommande l'observation des étoiles de son programme, programme reproduit succinctement dans le rapport du Président (p. 31 (1) (a)). Elle souhaite pour cet objet une entente entre un certain nombre d'Observatoires, entente qui pourrait être provoquée par le Président de la Commission.”

It was stated by M. A. Lambert that a list of about 4000 stars north of  $-15^\circ$  had been prepared. One-third of the list is being observed at the Paris Observatory, another third in Uccle. The co-operation of other observatories is invited.

#### *Commission 9. (ASTRONOMICAL INSTRUMENTS.)*

ACTING PRESIDENT: M. le Comte de la Baume Pluvinel.

SECRETARY: Prof. H. Chrétien.

The Commission discussed and adopted the President's report and passed the following resolution for submission to the General Assembly:

“La Commission souhaite que l'on se mette d'accord pour définir des nombres caractéristiques pouvant représenter les qualités optiques des grands instruments.”

#### *Commission 12. (SOLAR PHYSICS.)*

PRESIDENT: Dr C. E. St John.

SECRETARY: Dr M. Minnaert.

Dr St John explained why it would be necessary to reorganize Section 12. In the Committee there were too many members and too many sections. It was impossible for the President to write to 70 persons! At the request of the general secretary, propositions would be made for a fresh arrangement.

A first scheme was drawn up by Dr St John, Prof. Abetti, Prof. Brunner, Dr d'Azambuja and Dr Minnaert, in a preliminary meeting where they discussed the reorganization problem. This scheme was as follows:

A. Solar Eclipses.

B. Solar Physics.

1. Sun-spots, positions and areas.
2. Sun-spot numbers and character figures.
3. Prominences.
4. Spectroheliograph.
5. Solar radiation: ultra-violet and total.