

including geology and astronomy, and original research and investigation in pathology. The Moseley studentship is awarded for the furtherance of experimental research in pathology, physics, and chemistry, or other branches of science, but not in pure mathematics, astronomy, or any branch of science which aims merely at describing, cataloguing, or systematising. Forms of application, which must be returned by Oct. 8, are to be had from the Assistant Secretary of the Royal Society, Burlington House, W.1.

APPLICATIONS are invited for the following appointments, on or before the dates mentioned:—A graduate assistant to teach in the Junior Technical School, and senior course evening classes of the Technical College, Barrow-in-Furness—The Director of Education, Town Hall, Barrow-in-Furness (July 23). A graduate assistant master, with special qualifications in electrical engineering, to take electrical and mechanical engineering subjects, and some mathematics, at the Dartford Technical College—The Principal, Technical College, Dartford, Kent (July 25). An assistant lecturer and demonstrator in mechanical engineering in the Faculty of Engineering of the University of Bristol—The Registrar, Merchant Venturers' Technical College, Bristol (July 26). A graduate assistant master for geography at the Smethwick Junior Technical School—The Director

of Education, Education Offices, 215 High Street, Smethwick (Aug. 4). An assistant lecturer and demonstrator in botany at the University College of South Wales and Monmouthshire—The Registrar, University College, Cardiff (Aug. 4). An assistant lecturer in the Department of Electrical Engineering of the University of Birmingham—The Secretary, University, Birmingham (Aug. 11). A lecturer in physics at Auckland University College, New Zealand—The High Commissioner for New Zealand, 415 Strand, W.C.2 (Sept. 15); The Registrar, Auckland University College, New Zealand (Nov. 1). The Alfred Jones professorship of tropical medicine in the University of Liverpool—The Registrar, University, Liverpool (Oct. 1). A lecturer in agricultural chemistry and an advisory entomologist, in the University of Reading—The Registrar, University, Reading. An entomologist for service in India—"India," c/o Richardson and Co., 26 King Street, St. James's, S.W.1. A principal of the Chadacre Agricultural Institute, near Bury St. Edmunds, Suffolk—The Earl of Iveagh, 11 St. James's Square, S.W.1. A senior mathematical master at the Cheadle Hulme School, Cheshire—The Headmaster, Cheadle Hulme School, Cheshire. An aeronautical examiner, Air Ministry, Kidbrooke—The Secretary (I.G.), Air Ministry, Kingsway, W.C.2.

### Our Astronomical Column.

MERCURY A MORNING STAR.—Mercury will reach its greatest westerly elongation on July 21 (distance from the sun  $20^\circ$ ). During the last ten days of July the planet may possibly be glimpsed near the west-north-west horizon at about  $3^h 30^m$  A.M. The elongation is not a very favourable one, as it does not allow Mercury to remain above the horizon longer than about  $1^h 35^m$  before the sun rises. The twilight is always very strong at this season of the year, but the planet may be glimpsed on very clear mornings of the period stated by anyone who has fairly good sight and looks in the correct direction. On July 29 the planet's brightness will be equal to  $-0.5$  mag., which is about the same as Procyon, though not so great as that of Vega, Arcturus, or Capella. The disc of Mercury is so small that its light usually fluctuates or 'twinkles' like a fixed star, and this effect is enhanced by the unsteady vapours floating about at the low altitude in which the planet is always observed.

MAGNETIC STORM AND AURORA.—A magnetic storm, accompanied by a display of the aurora borealis, took place during the night of July 7 and morning of July 8. The magnetic disturbance reached a maximum between  $1^h$  and  $2^h$  on July 8, at the time when the aurora was seen at Greenwich to be at its greatest intensity. The range in declination registered at the Greenwich magnetic station at Abinger exceeded  $80^\circ$ , and this range occurred between  $1^h$  and  $2^h$  on July 8. About this time also, the horizontal force and vertical force traces went off the recording sheets. The ranges of these two elements exceeded  $500 \gamma$  during the storm. This magnetic storm is probably the largest recorded at Greenwich since that of May 13-17, 1921—it is certainly the largest since that of Oct. 15-16, 1926.

At the time of this recent storm there was a moderate-sized group of sunspots just past the sun's central meridian. Possibly spectroscopic observa-

tions which may have been made of this group will show it to have been unusual. There was a much larger group on the disc at the time, but this was a considerable distance east of the central meridian. The sun's general activity shown by spots has been increasing during the last few weeks.

A GENERAL CATALOGUE OF STELLAR PARALLAXES.—Prof. F. Schlesinger, who is recognised as one of the leading authorities on the determination of parallaxes by photography, has brought out a useful general catalogue of the parallaxes of 1870 objects, being all for which good determinations were to hand at the end of 1924. The probable errors of the results of various observatories have been rediscussed, and are in general somewhat larger than those given by the observatories themselves. Weighted means were formed, these being the quantities given in the catalogue, but individual values for many stars are given in the notes. There are 23 stars with parallax greater than  $0.2''$ , and 61 with parallax between  $0.1''$  and  $0.2''$ . The former is probably not far short of the actual number, but the latter must be very incomplete, since we should expect it to be seven times the former. The adopted value for Betelgeuse is  $0.017'' \pm 0.004''$ ; that for Arcturus is  $0.080'' \pm 0.005''$ ; that for Nova Persei (1901)  $0.011'' \pm 0.003''$ , the trigonometrical value being practically the same as that deduced from the light-time of the illumination of the surrounding nebula. The reduction from relative to absolute parallax has been applied to the printed values, except in a few cases, mentioned in the notes. The reduction was made by the formulæ in Groningen Publications. The parallaxes of Cepheids and clusters are included in the catalogue; they are easily picked out, since they extend beyond the third decimal, and are preceded by a string of zeros. Proper motions are given (total amount and position angle), except for the Cepheids and other remote objects.