

THE "Statistical Report of the Health of the Navy for the Year 1923" is presented by the Director-General, Surgeon Vice-Admiral Sir Joseph Chambers, K.C.B., and issued by H.M. Stationery Office (5s. net). The returns for the total force (89,100) show a marked improvement in the general health of the British fleet compared with the previous two years, the case, invaliding and death ratios all showing a decrease. This is doubtless largely due to the preventive measures now adopted. Health lectures are given by medical officers, and the men are warned of the risks they run in drinking polluted waters, eating raw vegetables and salads, oysters and other shellfish, and the rôle of flies in the spread of disease is explained. All water taken for drinking and cooking from the shore is chlorinated, and all fresh milk used, unless the source is well known, is sterilised. The excreta of all enteric patients are examined during convalescence on three occasions at monthly intervals, so as to eliminate carriers. All officers and men detailed for the Mediterranean, East Indies, and China stations are inoculated against typhoid and paratyphoid fevers before leaving England.

APPLICATIONS are invited for the following appointments, on or before the dates mentioned:—A public analyst for the borough of Northampton—The Town Clerk, Guildhall, Northampton (August 16). An

assistant lecturer in agricultural zoology at the North of Scotland College of Agriculture—The Secretary, 41½ Union Street, Aberdeen (August 19). Lecturers in agriculture, botany, and entomology and zoology at the Imperial College of Tropical Agriculture, Trinidad—The Secretary of the College, 14 Trinity Square, E.C.3 (August 21). An assistant lecturer in electrical engineering at the Royal Technical College, Glasgow—Prof. S. Parker Smith, Royal Technical College, Glasgow (August 23). A research assistant for work in connexion with colliery wire ropes, and a junior research assistant for work on materials and structures used for the support of underground workings—each under the Safety in Mines Research Board—The Under Secretary for Mines, Establishment Branch, Mines Department, Dean Stanley Street, S.W.1 (August 25). A technical officer for design of wireless apparatus for service aircraft and aerodrome use—The Superintendent, Royal Aircraft Establishment, South Farnborough, Hants (August 28, quoting No. A.121). An instructor in bee-keeping in the department of Agriculture of the University of Leeds—The Registrar (August 28). An assistant in the botany department of the University of Aberdeen—The Secretary (August 30). A head of the Department of Industrial Administration and a lecturer in the same subject at the Manchester Municipal College of Technology—The Registrar (September 20).

Our Astronomical Column.

SUNSPOT ACTIVITY.—Of the two naked-eye spots, Nos. 7 and 8, which were on the sun's disc together during the last week of June, the first had entirely disappeared when its position came again into view, and the second had diminished to a relatively small spot. A new group of considerable size has, however, been seen recently in transit across the disc and was a conspicuous naked-eye object to those observers who habitually watch these large spots. In a refracting telescope of 3 or 4 inches aperture, much interesting detail could be seen in the penumbral filaments. In type the group conformed fairly closely to that of a 'normal' stream, with a well-defined circular leader, a composite follower 12° in longitude behind, and a cluster of small unstable spots between. The axis of the stream was inclined about 15° equatorwards. Both the leading and following spots were large enough to be visible separately to unaided vision, especially on July 29, when their separation of 12° solar longitude was equivalent to nearly 4'.

The latitude of the group should be noted. Hitherto, no important group has appeared this cycle so near the sun's equator. In previous cycles, the first very large spots in latitudes so low as 10° have occurred about two years before the respective maxima. Data of position and area (expressed as a fraction of the sun's hemisphere) of the recent spot are as follows:

No.	Date on Disc.	Central Meridian Passage.	Latitude.	Area.
9	July 24-Aug. 5	July 30°0	11° S.	1/550

NAMING OF MINOR PLANETS.—The three planets that commence the second thousand have received names that recall the circumstances of the discovery of Ceres, the first member of the family, about a century and a quarter ago (*Astr. Nach.* No. 5454).

Number 1000, discovered by Reinmuth, has been named Piazzia, after the discoverer of Ceres; 1001, discovered by Beljovsky, has been named Gaussia, after the calculator of Ceres' orbit; and 1002, discovered by Albitzky, has been named Olbersia, after the detector of Ceres at its second opposition. These appropriate names were given by Mr. B. Asplind of Karlstad, Sweden, with the consent of the discoverers.

LUNAR AND PLANETARY TEMPERATURES.—The results of an investigation of planetary temperatures by Menzel, Coblentz and Lampland by means of the radiation transmitted through a water cell, are described in the *Astrophysical Journal*, vol. 63, p. 177. The theory of the method has previously been given by Menzel (*Astroph. Journ.*, vol. 58, p. 65), and rests on the fact that the solar energy reflected from a planet is of short wave-length, whereas the radiated planetary energy is of much longer wave-length. The water-cell transmission gives a measure of the ratio of the short-wave solar energy to the total energy, and hence of the amount of planetary radiation which is able to pass through our atmosphere. This atmospheric transmission depends on the spectral distribution of the radiation, and therefore, finally, upon the planetary temperature. The results of the latest work seem to show that the temperature of Mars may reach 10° C. at perihelion, but with large diurnal fluctuations (the night temperature being probably below -85° C.). The bright areas on Mars appear to be at a lower temperature than the dark areas, and the temperature of the south polar cap ranges from -100° C. to -15° C., suggesting ice or snow as a possible cause. Some results are also given for the moon, Venus, Jupiter, Saturn, and Uranus. There seems to be no evidence of internal heat in any of the giant outer planets.