

WE have received "A Guide to British Spas and Climatic Health Resorts," 1927, which is published by Messrs. J. and A. Churchill, 7 Great Marlborough Street, W. (1s. net). Detailed information is given of the situation, climate, bath establishments, and characters of the waters of the British spas, and of the class of cases likely to be benefited thereby. Information is also given respecting the principal British health resorts other than spas. Lists of hotels, hydros, and other residential accommodation are included.

APPLICATIONS are invited for the following appointments, on or before the dates mentioned:—A lecturer in building trades at the East London Technical College, Cape Province—The Secretary, Office of the High Commissioner for the Union of South Africa, Trafalgar Square, W.C.2 (Feb. 21). A junior scientific officer under the Directorate of Scientific Research of the Air Ministry—The Chief Superintendent, Royal

Aircraft Establishment, South Farnborough, Hants (Mar. 9, quoting A. 107). A director of cancer research in the University of Sydney—The Agent-General for New South Wales, Australia House, Strand, W.C.2 (May 16). A research assistant, with qualifications in physical chemistry, at the Huddersfield Technical College—H. H. Gray, Department of Chemistry, Technical College, Huddersfield. An instrument maker, preferably with electrical and optical training—The Secretary, Experimental Department, Fine Cotton Spinners' and Doublers' Association, Ltd., Rock Bank, Bollington, nr. Macclesfield.

ERRATUM.—Prof. H. S. Allen points out that in his letter in NATURE of Feb. 12, p. 237, on "Spinning Electrons and Protons," the late Prof. McLaren's initials, correctly given by him, were printed as "G. B." Prof. McLaren's Christian names were Samuel Bruce.

Our Astronomical Column.

THE COMAS SOLA QUICKLY MOVING ASTEROID.—This object was at first reported as of doubtful nature, comet or asteroid. It is now assigned to the latter class, with designation 1927 AA.

Dr. A. C. D. Crommelin has obtained the following orbit from observations extending from Jan. 10 to Jan. 24:

$$\left. \begin{aligned} T &= 1926, \text{ Sept. } 21.7559 \text{ U.T.} \\ \omega &= 147^\circ 25' 14.2'' \\ \Omega &= 279 \quad 4 \quad 15.9 \\ i &= 24 \quad 47 \quad 58.7 \\ \phi &= 16 \quad 8 \quad 18.3 \\ \log q &= 0.229249 \\ \text{Period} &= 3.5977 \text{ years.} \end{aligned} \right\} 1927.0$$

The orbit is of the Aethra type. The inclination is high, but much less than that of Pallas. The planet is receding from earth and sun, so its light will diminish.

A similar but somewhat brighter object is reported by Mr. Oikawa of Tokyo. It is some 20° farther north than that of Prof. Comas Sola, but has the same daily motion, $-1^m 24^s$, south $17'$. Its magnitude is 11.

THE PLANET NEPTUNE.—Mr. M. E. J. Gheury de Bray writes: "Neptune is exceptionally well placed for observation now. Any one can pick it up readily with an opera-glass magnifying two or three times. Pointing the binoculars to α Leonis (Regulus), the next star in the field in order of brightness, on the right, is ν Leonis. The next object in the field in order of brightness after ν Leonis is a little above this star and on the right. This object is Neptune. A small telescope will show other stars which may lead astray the inexperienced person. An opera-glass will only show these three objects—Regulus, ν Leonis, and Neptune, the last being the faintest of the three, so that it can be picked up in this way with the greatest ease. It is moving west and will soon approach other stars, and will then be less easy to identify, so it should be looked for now."

SUNSPOT FREQUENCIES AND TERRESTRIAL PHENOMENA.—An interesting paper (*Journal of the College of Science, Imperial University, Tokyo*, vol. 44, Art. 6) by Prof. T. Terada has recently been received which bears the title "On Some Remark-

able Relations Between the Yearly Variations of Terrestrial Phenomena and Solar Activities." The association of earthquakes with spot frequencies in the north and south hemispheres of the sun, called N and S , is examined, and Terada finds that for some places in Japan and Jamaica, minima of earthquake frequency occur in years when $N - S$ is small, while for others, maxima occur under these conditions: some places show neither feature. Relationships with N and S are also found for the data of pressure and temperature for a network of stations over the world. The pressure associations resemble those for earthquakes; but the classification for temperature is more complex, and we have in addition one type in which maxima occur both with small and large values of $(N - S)/(N + S)$, minima occurring with intermediate values; while in another type maxima and minima have interchanged places. The paper contains much that is suggestive, and doubtless many of the results indicated are true. But there is no fixed criterion for a maximum or minimum, so that two workers may differ in their selection of these critical points; and, as Terada's statements of relationship have in most cases neither a diagram nor a numerical statement in the paper to support them, some readers will wish for the ordinary methods of correlation with their definite statement of results and their comparison with what can be expected from the working of pure chance. The idea that important geophysical phenomena depend on the difference of the sun's activities in the northern and southern hemispheres is so important that Prof. Terada's future papers will be awaited with much interest.

THE OBSERVER'S HANDBOOK FOR 1927 (ROYAL ASTRONOMICAL SOCIETY OF CANADA).—This book contains much matter of use to observers. Besides the usual ephemerides there are maps showing the tracks of the planets among the stars. Both Jupiter and Uranus come to the north of the equator this year, after being south of it for 6 and 42 years respectively. They will be near each other in July. The period of Jupiter IX. is erroneously given as 3 years; it should be 745 days. There is a very useful table giving positions, magnitudes (apparent and absolute), spectral type, parallax, proper motion and radial velocity of a considerable number of stars.