

On July 20 a public meeting will be held, presided over by Lord Balfour, and Sir Watson Cheyne, Prof. T. Tuffier (Paris), Prof. Harvey Cushing (Harvard University), and Prof. James Stewart (Dalhousie University, Halifax, Nova Scotia) will deliver addresses. Inscriptions are to be placed on the walls of 11 Rutland Street and 9 Charlotte Square, both of which were occupied by Lister while in Edinburgh, and a prize of £25 and a gold medal is offered for an essay on "The Influence of Lister on Surgery," the competition being limited to first-year students of medical schools of the British Empire. A Lister memorial volume, edited by Dr. Logan Turner, is in preparation; in addition to personal reminiscences of Lister, it will contain chapters on surgery before and after Lister by Mr. Alexander Miles and Prof. Fraser respectively, while Sir E. Sharpey-Schafer will deal with Lister's work as a physiologist.

A USEFUL catalogue (No. 148) of books on gardening and botany has just been circulated by Messrs. Dulau and Co., Ltd., 34 Margaret Street, W.1. It gives the titles of nearly 900 works classified under appropriate headings and should be of service to many readers of NATURE. It will be sent free of charge to any applicant.

APPLICATIONS are invited for the following appointments, on or before the dates mentioned:—An assistant chemist at the Fruit and Vegetable Preservation

Research Station of the University of Bristol, Campden, Gloucestershire—The Resident Director, University of Bristol Research Station, Campden, Gloucestershire (Mar. 14). A keeper of the Birmingham City Museum and Art Gallery—The Town Clerk, Birmingham (Mar. 19). A director of research under the British Cotton Industry Research Association—The Secretary, British Cotton Industry Research Association, Shirley Institute, Didsbury, Manchester (Mar. 21). A headmaster of the R.N. College, Dartmouth—The Secretary, C.E. Branch, Admiralty, S.W.1 (Mar. 21). Chemical assistants in the public health department of the L.C.C.—The Clerk of the L.C.C., County Hall, Westminster Bridge, S.E.1 (Mar. 25). A director of research into the prevention of water pollution and cognate problems—The Secretary, The Department of Scientific and Industrial Research, 16 Old Queen Street, S.W.1 (Mar. 31). A lecturer in advanced and economic entomology in the University of Cambridge—The Registry, University, Cambridge (May 31). A chemist and metallurgist in the Egyptian Government Assay Office, Cairo—The Chief Inspecting Engineer, Egyptian Government, 41 Tothill Street, S.W.1. An entomologist under the Sierra Leone Government, principally for tsetse fly investigation work—The Private Secretary (Appointments), Colonial Office, 38 Old Queen Street, S.W.1. A junior assistant in the physics department of the Experimental Station, Porton, Wilts—The Commandant, Experimental Station, Porton, Wilts.

### Our Astronomical Column.

BRILLIANT FIREBALL ON FEB. 25.—Mr. W. F. Denning writes: "This object appeared at 11.54 P.M. and caused a vivid illumination of the sky over the south-west of England. There was a double outburst resulting in two flashes of dazzling intensity. Some observers thought the size of the nucleus about equal to that of the full moon, but considered the luminous effect greater than that of the moon coming suddenly from behind dark clouds. The light was white, similar to that of magnesium. The flight was slow, and perhaps occupied 3 seconds in traversing 20°. A considerable number of descriptions are coming in from various places, but for scientific purposes very few are of use. Before the path of the body can be ascertained, more data must be awaited. There is a strong probability, however, that the meteor was directed from a radiant point in Leo and that it passed over the south-east region of Devonshire, falling from 66 miles to 26 miles in height at a velocity of 18 miles per second. Several large fireballs have been directed from this radiant (near Regulus) at the end of February in past years."

SOLAR RADIATION.—In *Memoirs of the Imperial Marine Observatory*, Kobe, vol. 3, No. 1, R. Sekiguti gives the results of an investigation undertaken by him for the purpose of detecting a possible direct effect of the sun's activity on air temperatures. The Greenwich daily sunspot areas are correlated with daily temperature rises observed for a standard type of weather. The meteorological data were collected from five stations in the plateau district of central Japan, and a selection was made from the years

1905-13 according to certain criteria of cloudiness, wind velocity, etc. The general conclusion advanced by the author is that there is an indication that small temperature rises occur with an inactive solar surface, and that moderate sunspot activity is responded to by high temperature rises. This conclusion is stated with diffidence, and the scantiness of the meteorological data and the difficulties of dealing with air temperatures for this purpose are frankly admitted.

THE SUN'S MOTION DERIVED FROM FAINT STARS.—Perplexity has frequently been caused by the wide discordances between the positions of the solar apex when derived from stars of different magnitudes. These have in some cases been traced to systematic errors in the adopted proper motions. Mr. P. van de Kamp (*Bull. Astron. Instit. Netherlands*, vol. 3, No. 112) gives a new determination, based (1) on the photographically determined proper motions of 1900 tenth magnitude stars, uniformly distributed, but all north of declination  $-30^\circ$ ; (2) from the radial velocities of 105 stars of magnitudes 9-10 within  $50^\circ$  of the solar apex or antapex. The combined result for visual magnitude  $10^m.1$  gives for the apex, R.A.  $277^\circ \pm 3^\circ$ ; Decl.  $38^\circ \pm 3^\circ$ , if Raymond's corrections are applied to Boss's proper motions in decl., or  $31^\circ \pm 3^\circ$  if van Rhyn's further corrections are applied; solar velocity  $18 \pm 2.2$  km./sec. for visual magnitude 9.2. These results are in fair accord with W. W. Campbell's values derived from the radial velocities of 2034 stars brighter than 5.5, namely, R.A.  $268^\circ.9 \pm 2.2$ , Decl.  $+27^\circ.2 \pm 1^\circ.7$ , Vel.  $19.0 \pm 0.6$  km./sec.