Mr. M. H. Donald a large collection of fossil invertebrates, formed by the late Mrs. J. Longstaff, chiefly from the Carboniferous of Great Britain, and including more than 20 figured specimens. The Mineral Department has received by gift from Prof. E. D. Mountain a specimen of boksputite, a species new to the collection; from Dr. E. S. Simpson distorted crystals of cassiterite from Pilbara goldfield; and from Mr. R. Murray-Hughes a series of rocks collected by him on the Aberdare Range, Kenya Colony, in 1933. A piece, weighing 99 gm., of the meteoric stone which fell on May 26, 1932, at Kuznetzovo, Tatarsk district, Siberia, has been acquired by exchange.

Among recent acquisitions of the Department of Botany is a complete collection of the observed phanerogamic flora of Etah (Inglefield Land, northwest Greenland) made by Dr. G. N. Humphreys on the Oxford University Ellesmere Land Expedition. A few gatherings from the Disco area of west Greenland are included, but none from Ellesmere Land, as the Expedition left there before the collecting season. The material, of about three hundred numbers, is well collected and dried, and is a valuable addition to those already in the Museum from these high altitudes in Greenland. Another addition comprises 122 sheets of Finnish plants collected by Mr. H. Krogerus, who accompanied Mr. G. J. Kerrich on his recent expedition. The plants are all critical species, and correspond to a list supplied by the Department. They were named in Finland, and thus have an additional value. Collections from Mozambique, Angola and Tanganyika have also been received. Miss G. Lister has presented the simple microscope and stand of her grandfather (Joseph Jackson Lister) to the Department. This he used "when he was in the full swing of work". It was constructed before or about 1820. J. J. Lister (1786-1869) was "the discoverer of the principle upon which the modern microscope is constructed" ("Dictionary of National Biography").

# New Meteorological Observatory at Brisbane

THE formal opening of Crohamhurst Observatory, situated in lat. 26° 50′ S., long. 152° 55′ E., by H. E. the Governor of Queensland took place on August 13, 1935. The observatory will be concerned with meteorological and solar work, and will in particular attempt seasonal forecasting on the basis of the sunspot cycle. The City of Brisbane is visited by disastrous floods about every twenty years, and the rainfall which is received in the valley in which the new Observatory is situated is the sole cause of these floods; in fact. the record rainfall of Australia, 35.7 inches in 24 hours, was recorded at Crohamhurst in 1893. The director of the new observatory is Mr. Inigo Jones, who has been engaged on meteorological work in this part of Australia for forty years, and claims an accuracy of more than eighty per cent in forecasting weather conditions. His views on the relation of weather to the sunspot cycle and to the movements of the planets have been referred to from time to

time in our columns (see NATURE, July 2, 1932, p. 31, and Sept. 2, 1933, p. 345). Brisbane is to be congratulated on the possession of its new observatory.

# Geological Survey and Museum

From the opening of the Geological Museum at South Kensington on July 3 until December 31. 159,000 visitors passed through its doors. This compares with an average total of 18,000-20,000 a year at the old museum in Jermyn Street. Recent additions and presentations to the Museum include a fine collection of cut zircons, one royal blue stone of 44 carats, being unique in size and colour; a collection of multi-coloured doubly-terminated tourmaline crystals from Mesa Grande, California; a large composite photograph of the moon from the Mount Wilson Observatory, and other series of enlarged photographs of earthquakes and other geological phenomena; more than two thousand British building stones and other collections illustrating economic geology, bequeathed by Mr. B. E. Laine-Pearson; and some 250 rocks recently collected for the Museum from southern Norway.

### Sunspots during 1935

A PROVISIONAL value of the mean daily area of sunspots for 1935 is 550 millionths of the sun's hemisphere. This may be compared with 119 millionths for the year 1934 and 88 millionths for 1933, the date of the last minimum of the 11-year cycle being 1933.8. During 1935, solar activity—as shown by the occurrence of sunspots, disk markings in hydrogen and calcium light, and prominences at the limb-increased to a marked degree, especially during the latter half of the year. The maximum of the cycle, which normally occurs about four years after the preceding minimum, may be expected in 1937-38, but the epochs of the cycle are not amenable, as is well known, to exact prediction.

### Recent Large Sunspots

SINCE the beginning of last December, when a very large group of sunspots crossed the sun's disk, there have been other groups of lesser magnitude but nevertheless of considerable extent, especially the group most recently visible. These groups are summarised as follows, the area being expressed in millionths of the sun's hemisphere. It may be noted that a single spot of area 500 units, when near the centre of the disk so as to escape foreshortening, is usually visible to the naked eye. Times are in U.T.

Date on Disk	Central Meridian Passage	Latitude	Maximun Area
Dec. 6-19	Dec. 12.5	23° S.	900
Dec. 28-Jan. 9 Jan. 1-14	Jan. 3·4 Jan. 7·8	12° S. 27° N.	900 1100
Jan. 14-26	Jan. 19.9	32° S.	1800

No magnetic storms were recorded at Greenwich (Abinger Station) on or about the time of central meridian passage of any of the above spots, but from Jan. 8<sup>h</sup>. 4<sup>d</sup>. for three or four days the traces appear distinctly unsteady. On Jan. 24<sup>d</sup>. 17<sup>h</sup>., however, another disturbance commenced; but this

can scarcely be taken as being related to the group of spots that crossed the central meridian on Jan. 19.9. There were, however, several smaller groups following in longitude from which the solar disturbance, presumably responsible, might have originated.

## The Quadrantids, 1936

Mr. G. E. D. Alcock, of Peterborough, observed this shower on the early morning of January 4. The sky cleared at January 3, 13h. 45m. (G.M.A.T.) and clouded over at 15h. 55m. The moonlight was a big hindrance, but 17 meteors were mapped. radiants of Quadrantids were determined: (a) $229\frac{2}{3}^{\circ} + 53^{\circ}$ ; diameter  $1 \cdot 1^{\circ}$ ; 5 meteors;  $229\frac{1}{2}^{\circ} + 49^{\circ}$ ; diameter  $1.4^{\circ}$ ; 6 meteors.

#### Announcements

SIR ARTHUR SMITH WOODWARD has been elected a member in the Section of Zoology, and Dr. Ulrich Wilcken (Berlin) a member in the Section of Historical and Philological Sciences, of the Royal Swedish Academy of Sciences.

THE Council of the Institution of Naval Architects has awarded the premium of the Institution for the year 1935 to Mr. J. L. Scott, of Armstrong College (University of Durham), for his paper "A Simplified Form of Direct Flooding Calculations", and the Wakeham prize for the year 1935 to Mr. W. H. C. Nicholas, of Hull, for his paper "The Evolution of the Modern Steam Trawler with Superheating".

DR. FRITZ LEJEUNE, professor of the history of medicine at Cologne, has been elected a member of the Lisbon Academy of Sciences.

The sixth International Congress of Physical Medicine will be held in London on May 12-16 under the presidency of Lord Horder. information can be obtained from the Honorary Secretary, Dr. Albert Eidinow, 4 Upper Wimpole Street, W.1.

THE opening meeting of the Photometric Section of the Illuminating Engineering Society, which was to have taken place on January 28, will take place at the Westminster Technical Institution, Vincent Square, S.W.1, at 7.0 p.m. on February 4, when Dr. J. W. T. Walsh will deliver his opening address.

WE have received from Messrs. Charles Baker, 244 High Holborn, London, W.C.1, a copy of their latest catalogue of microscopes and accessories, which has just been published. Several new pieces of apparatus have been introduced since the publication of the last issue; these include a Greenough binocular dissecting microscope, a low-voltage research microscope lamp, a school micro-projection outfit of moderate price, and a low-priced detachable universal mechanical stage for the microscope.

In order to meet a demand for a vitamin preparation for medical practice, and particularly for hospital out-patients, British Drug Houses, Ltd., Graham Street, City Road, London, N.1, have introduced "Multivite Pellets". The preparation consists of chocolate-coated tablets, each tablet or 'pellet' containing vitamins A (3,000 international units), C (100 I.U.), and D (600 I.U.), together with vitamin B complex equivalent to 2 gm. of yeast. The dosage is, for adults 2-4, for children 1-2, pellets daily, which may be swallowed or eaten as a sweetmeat. Literature and sample will be forwarded on applica-

THE spring programme of the Electrical Association for Women has recently been issued. The London branch has arranged an interesting series of lectures, papers and visits. Special lectures and demonstrations for teacher members have also been arranged in connexion with a Teachers' Circle which is open to members of the Association who are in the teaching profession. A special programme for a Demonstrators' Circle has also been arranged. The eleventh Annual Conference of the Association will be held at Park Lane Hotel, London, W.1, on March 13-15. Further particulars can be obtained from the Secretary of the Association, 20 Regent Street, London, S.W.I.

Dr. C. E. K. Mees, vice-president in charge of research and development at the Eastman Kodak Co., who has just delivered a course of Christmas lectures on "Photography" at the Royal Institution, is to embody the substance of them in a book which will be published in the autumn by Messrs. G. Bell and Sons, Ltd. Among the topics with which Dr. Mees will deal are the methods used in the manufacture of photographic films; colour photography; the making of motion pictures, cartoons and sound recording; the application of photography in many fields of science and industry; and the photography of coloured objects in black and white.

ERRATUM.—In a paragraph entitled "Transpiration and Stomata in Desert Plants" in NATURE of December 21, 1935 (p. 993), the authors of the paper under notice are wrongly given as A. H. Nontasir and A. M. Nigaleid; the authors are A. H. Montasir and A. H. Migahid.

APPLICATIONS are invited for the following appointments, on or before the dates mentioned:

A lecturer in geography (woman) in Whitelands College, Putney, London, S.W.15—The Secretary (Feb. 14).

An official fellow in chemistry in Queen's College, Oxford-The Provost (Feb. 15).

Professors of economics, politics, pure chemistry and applied chemistry in Andhra University, Waltair, India-The Secretary, The Universities Bureau, 88a, Gower Street, London, W.C.1 (March 1).

A professor of physics in the University of Birmingham-The Secretary (March 2).

A head of the Department of Mechanical and Structural Engineering and Building of the Borough Polytechnic, Borough Road, London, S.E.I-The Principal.