

water tightness, greatly to the benefit of the crews, while in trawlers the welding of seams has eliminated the trouble with loose rivets caused by the impact of the heavier portions of the fishing gear. It is inevitable that this method will profoundly modify both the design and the building of ships, as the pre-construction of parts is more suitable to the technique of welding.

Catalogue of Earthquakes, 1925-30

ALL those who have used the late Prof. Turner's catalogue of earthquakes for the years 1918-24 will welcome its continuation for the next six years by Miss E. F. Bellamy "as a contribution to earthquake science and as a personal memorial of respect to Prof. H. H. Turner". The catalogue (British Association, Burlington House, London, W.1. 2s.), as before, is compiled from the International Seismological Summary, and gives for each earthquake the time at the origin, the position of the epicentre, the number of stations providing records of the earthquake, the last occasion on which the same focus was in action, and the number of "minor entries" or records that are not sufficient to determine the position of the epicentre. The appendix contains notes on earthquakes with unusually deep foci, etc. The number of new epicentres determined is 1,052, raising the total number of known epicentres to 6,215. A remarkable feature of the catalogue is that, with its thousands of entries, it yet seems unusually free from errors, printer's or otherwise, only one so far having been discovered (Nov. 31 for Nov. 13, p. 12).

Investigation of British and Irish Earthquakes

THE study of British and Irish earthquakes, carried out by Dr. C. Davison between 1889 and 1916, has been resumed by Dr. A. T. Dollar, who appeals for assistance in completing the catalogue of those earthquakes which occurred between January 1, 1916, and the present date, and also in recording future disturbances of the same kind. Personal experiences, or relevant cuttings from accounts in scientific journals and newspapers are sought. To facilitate the reporting and recording of data, a questionnaire and circular letter will be forwarded (together with a stamped, addressed envelope) on request to Dr. A. T. Dollar, Emmanuel College, Cambridge.

An Earthquake Research Commission for India

THE Bihar earthquake of 1934 and the Quetta earthquake of the present year have shown the need for an Earthquake Research Institute in India on the same lines as that which has done such admirable work in Japan. A recent issue of *Culture and Science* (1, 233, 274, 288; 1935) has several paragraphs on the subject. A committee of the Geological Survey, consisting of Dr. A. M. Heron, Mr. W. D. West and Mr. J. B. Auden, has drawn up a list of Indian stations at which it is desirable that seismographs should be erected. The list was communicated to the Council of the National Institute of Sciences, India, and it was agreed that the Institute should urge the Government to instal instruments at the

places mentioned. The Council has also appointed a subcommittee—Dr. S. Banerji, Dr. M. N. Saha, Dr. N. R. Sen and Mr. W. D. West (secretary)—to advise the Institute on seismological questions, and it was considered that the subcommittee might afterwards be merged into an Indian National Commission for the study of earthquakes. It is satisfactory to learn from the daily Press that the Government is contemplating the appointment of such a commission.

Centenary of Ampère

ACCORDING to the *Revue Scientifique* of October 26, arrangements are being made at Lyons to hold an exhibition next spring in connexion with the commemoration of the centenary of the death of the eminent French physicist, André Marie Ampère. The exhibition will be arranged to illustrate the many applications of electricity. Ampère was born at Lyons on January 22, 1775, being the son of a merchant of that place who was beheaded during the Terror. He became a professor at the Ecole Polytechnique in 1805, and was elected a member of the Paris Academy of Sciences in 1814. His discovery of the fundamental laws of electro-dynamics was made in 1820. His death took place on June 10, 1836, at Marseilles, where he was buried, but in 1869 his remains were transferred to the cemetery at Montmartre, Paris. A statue of him was erected at Lyons in 1888.

Exhibition of Microscopes

MESSRS. W. WATSON AND SONS, LTD., have arranged an exhibition of microscopes to be held in the Central Hall, Westminster, London, S.W.1, on December 9-14. A large number of representative microscopes will be on view, many with prepared slides already mounted. The object of the exhibition is not only to popularise the microscope, but also to demonstrate its utility in various forms of scientific inquiry, in biology, geology, metallurgy, etc. Some telescopes will also be on view. Messrs. Chance Bros. will exhibit various glass products and Messrs. Kodak will exhibit different types of photomicrographs. The Quekett Club is arranging an exhibition of various slides, including specimens of living pond life. During the exhibition, the following lectures will be delivered: "The Part the Microscope plays in the Scientific Control of the Railway", by T. H. Turner, on December 10; "The Microscopist at the Seaside", by Martin Duncan, on December 11; "The Manufacture of Optical Glass", by H. C. Rands, on December 12. The lectures are at 7 p.m. The exhibition is open to the public free of charge. Catalogues and further information can be obtained from Messrs. W. Watson and Sons, Ltd., 313 High Holborn, London, W.C.1.

Another Large Sunspot

FOR the third time within a month, a new group of sunspots large enough to be seen with the naked eye has appeared, and is in transit across the sun's disk from November 26 until December 9, the date of central meridian passage being December 2.1.

The area of the present group, which consists of a long stream of spots over 100,000 miles in length with a large component in the middle, increased from about 400 millionths of the sun's hemisphere on November 27 to 1500 millionths on November 29. Since the typical curve of growth of large spots shows the maximum area to be reached between the fifth and tenth days after their initial formation, it is probable that the group may grow still larger before it disappears around the western limb. In any event, a maximum area of 1500 millionths has not been equalled since February 1933, when the last big group of the preceding cycle (ending about 1933.8) was recorded.

Announcements

PROF. F. O. BOWER, emeritus professor of botany in the University of Glasgow, has been elected a corresponding member of the Prussian Academy of Sciences.

PROF. W. H. HOFFMANN, of the Finaly Institute of Havana, has been elected president of the recently founded Cuban Society of Biology.

SOVIET RUSSIA has fifty aeroplanes fitted up as small hospitals, the smallest having room for three patients, a doctor and two assistants. In urgent cases, important operations can be performed during flight.

A CONFERENCE on "Mechanization in Mixed Farming" will be held under the joint auspices of the School of Rural Economy, the Institute for Research in Agricultural Engineering and the Agricultural Economics Research Institute of the University of Oxford at Rhodes House, Oxford, on January 7-10. The opening address will be delivered by Prof. J. A. S. Watson, Sibthorpean professor of rural economy in the University. Further information can be obtained from the Conference Secretary, Institute for Research in Agricultural Engineering, Parks Road, Oxford.

THE seventh Pan-Russian Congress of Balneology will be held at Moscow under the presidency of Prof. Danilevsky on December 25-31, when the following subjects will be discussed: the balneological resources of the Soviet Union and the immediate prospects of their utilisation; mineral waters and the indications for their application; radioactive waters; comparative action of sulphurous and bicarbonate waters; medical climatology and climato-therapy; bath treatment of children's diseases. Further information can be obtained from the organising committee, Boulevard Novinsky 9, Moscow.

At the Sixth International Congress of Genetics held at Ithaca, New York, 1932, a Permanent International Committee of Congresses of Genetics was elected consisting of representatives of fifteen different countries, and Prof. Otto L. Mohr, professor of medicine in the University of Oslo, was elected chairman. This committee has accepted the invitation of the Academy of Sciences of the U.S.S.R. to

hold the Seventh International Congress in Moscow and Leningrad in 1937. The date of the Congress will be decided upon later. It may be mentioned that in 1937 an All-Union Agricultural Exhibition will be held in Moscow, which undoubtedly will prove of great interest to many members of the International Congress on Genetics.

THE issue of "Illustrations of New Conifers" by the late H. Clinton-Baker and A. Bruce Jackson, in one volume at 84s. is announced. The book will supplement the "Illustrations of Conifers" issued more than twenty years ago. It will be published by Messrs. Simson and Co., Ltd., 12 and 14 Parliament Square, Hertford, Herts.

WE have received from Messrs. Flatters and Garnett, Ltd., 309 Oxford Road, Manchester, 13, their new Catalogue "S" of stains and reagents for microscopical work, chemicals, and bacteriological culture media. A new item included is their "neutral mountant" for mounting microscopical specimens in the place of the ordinary Canada balsam. This is stated to be quite neutral in reaction and non-crystallisable, and not to affect stains.

WE have received the first number of *Revista de Quimica e Farmacia*, July 1935, published at Rio de Janeiro and edited by C. H. Ljberalli, who writes an introductory preface. The journal, which is published monthly, is divided into scientific and professional sections: articles in the first part include one by Prof. Costa on the biochemistry of zinc and another by Ljberalli on the reaction of tartrates with the Möhler-Deniges reagent: gluconic, lactic and pyruvic acids also give a red-violet colour with the reagent, and bromine and iodine hinder its appearance, but permanganate and bichromate in small amounts do not interfere. The journal also contains abstracts from current literature.

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

An assistant (Grade III) for research on internal combustion engines in the Royal Aircraft Establishment, South Farnborough, Hants (Dec. 13).

A lecturer in electrical engineering in the Sunderland Technical College—The Chief Education Officer, 15 John Street, Sunderland (Dec. 16).

A director of sponge fisheries investigations, and a biological and a chemical assistant—The Director of Recruitment (Colonial Service), 2 Richmond Terrace, Whitehall, S.W.1 (Dec. 31).

A Lancashire-Spencer professor of physics in University College, Nottingham—The Registrar (Jan. 20).

A director of the Indian Lac Research Institute, Namkum, Ranchi—The High Commissioner for India, General Department, India House, Aldwych, London, W.C.2 (Dec. 21).

A professor of physics in Raffles College, Singapore—The Secretary, Universities Bureau of the British Empire, 88A Gower Street, W.C.1.