

pages dealing with 180 epicentres, 77 being new and the remainder repetitions from old epicentres. Five deep-focus shocks are listed, namely, those of April 20, May 6, 24, 27 and 28. These were respectively in the Pacific Ocean north-west of the Ladrone Islands, in the Pacific Ocean south of Panama, in the deep ocean off the east coast of Japan, near the Pamirs north-west of India, and in the Pacific Ocean immediately to the south of the main island of Japan. It would be an advantage if all recording stations could send in their readings promptly, so that the interval of six years between the occurrence of earthquakes and the publication of authoritative data on them could be reduced.

#### Iron and Steel Institute Awards

THE following awards have been made by the Iron and Steel Institute: the Andrew Carnegie Gold Medal for 1938 to Dr. James White, of Glasgow, in respect of his paper on "Equilibrium at High Temperatures in Systems Containing Iron Oxides"; an Andrew Carnegie Gold Medal also to Dr. W. Ruff, of Wetzlar-Lahn, Germany, in respect of his paper on "The Running Quality of Liquid Malleable Iron and Steel", published in 1936; the Williams Prize for 1938 for a paper of practical interest to Mr. D. V. Krishna Rao of Bhadravati, India, in respect of his paper on "The New Steel Plant of the Mysore Iron and Steel Works, Bhadravati, India"; the Ablett Prize for 1939, for a paper by a junior engineer, to Mr. H. Escher of Wollongong, Australia, for his paper on "Ten Years' Development in Steam Engineering at the Port Kembla Steel Works, N.S.W., Australia". The following Andrew Carnegie research scholarships have been awarded: O. Gessner (Breslau, Germany), £100 in aid of a research on the viscosity of cast-iron alloys, steel, metals and alloys and slags; B. Ljunggren (Stockholm, Sweden), £100 for a microsclerometric investigation of grain boundaries; G. Parker (University, Leeds), £100 in aid of a research on oxidation and sealing of steel.

#### Institution of Electrical Engineers Awards

THE Council of the Institution of Electrical Engineers has made the following award of premiums for papers read or published during the session 1938-39: *Institution Premium*, to Dr. T. E. Allibone, F. E. Bancroft and G. S. Innes; *Ayrton Premium*, to F. W. Lawton; *Fahie Premium*, to K. L. Wood; *John Hopkinson Premium*, to N. F. T. Saunders; *Kelvin Premium*, to Dr. L. Hartshorn and E. Rushton; *Paris Exhibition (1881) Premium*, to R. Nelson; *Webber Premium*, to N. F. S. Hecht; *Overseas Premium*, to H. S. Hvistendahl; *Extra Premiums*, to G. H. Fletcher and A. Tustin; Dr. W. Betteridge and J. A. Laird; F. Brailsford; J. Higham and J. P. Wolfenden; Dr. K. L. Jensen; *Wireless Section Premiums*, to L. W. Hayes and B. N. MacLarty (Duddell Premium); Dr. J. D. McGee and Dr. H. G. Lubszynski; Dr. R. L. Smith-Rose and Dr. H. G. Hopkins; P. R. Coursey and S. N. Ray; *Meter and Instrument Section Premiums*, to Dr. E. G. James, G. R. Polgreen and G. W. Warren (Silvanus Thompson Premium); Dr. H. M. Barlow; D. C.

Gall; G. F. Shotter; *Transmission Section Premiums*, to Dr. W. G. Radley and C. E. Richards (Sebastian de Ferranti Premium); Prof. W. J. John and Dr. C. H. W. Clark; E. W. W. Double and W. D. Tuck; T. R. Scott and R. C. Mildner.

#### Announcements

MR. F. J. DU TOIT, representative of the Union of South Africa on the executive council of the Imperial Agricultural Bureaux, has been appointed chairman of the council, in succession to Lieutenant-Colonel George P. Vanier, who resigned on taking up an official appointment abroad.

A COMMITTEE has been formed to present Prof. Jules Bordet, director of the Brussels Pasteur Institute, with a medal on the occasion of his being made a Commander of the Legion of Honour. Subscriptions should be sent to M. Georges Masson, 120 Boulevard Saint Germain, Paris 6<sup>e</sup>.

AT the annual general meeting of the Institute of Wireless Technology held on April 28, the following officers were elected for the year 1939-1940: *President*, Mr. Sydney A. Hurren; *Honorary Treasurer*, Mr. George Lea. The assistant secretary is Mr. E. Carter, I.W.T., 4 Vernon Place, Southampton Row, London, W.C.1.

PROF. FREDERICK C. LEONARD, chairman of the Department of Astronomy of the University of California, Los Angeles, will be visiting professor of astronomy in the summer session of the University of British Columbia, Vancouver, Canada, during July 3-August 18, while Prof. Daniel Buchanan, dean of the Faculty of Arts and Science and head of the Department of Mathematics of the University of British Columbia, will be visiting professor of astronomy and mathematics in the summer session of the University of California, Los Angeles, during June 26-August 4.

THE twenty-sixth annual meeting of the Swiss Röntgen Society will be held in Zurich on June 3 and 4, when the subjects for discussion will be cosmic radiation, the biology of cosmic radiation and the radiological appearance of pulmonary tumours. Further information can be obtained from the secretary, Dr. Max Hopf, Effingerstrasse 49, Bern.

VOLUME 35A of the *American Journal of Science* (1938) is dedicated to Dr. Arthur L. Day and contains a series of papers by members of the scientific staff of the Geophysical Laboratory of the Carnegie Institution of Washington, from the directorship of which Dr. Day retired in 1936. In a short foreword it is stated that the publications from the Laboratory number one thousand and contain a body of knowledge which is being successfully employed in the interpretation of geological observations. The volume contains several very interesting papers, among which may be mentioned those on the system water-boron oxide and the system calcium sulphate-water, which elucidate some previously obscure points in these subjects.