

continent whose discovery by Cook began the process of events that gave Britain one of the most faithful and loving of her daughters. It has been sent you in exchange. We have taken from you the home in which Cook's father and mother lived, which this day is being opened in Melbourne in one of the loveliest of our gardens. Beautiful English trees overhang it, green English lawns surround it, and glowing flowers form its setting." In the course of his speech Mr. Linton said: "Such men as James Cook are beacons. In our schools it should be our care that men like this should be held up to our children to follow, quite as much as those great warriors whose ultimate building lay through destruction rather than in construction."

The Linnean Society of London

THE annual dinner of the Linnean Society of London was held at the Hotel Washington on October 18. The president, Dr. W. T. Calman, was in the chair, and the official guests were Sir Richard and Lady Gregory, and Dr. G. F. Herbert Smith. Following the dinner, a reception was held by the president and Mrs. Calman in the rooms of the Society at Burlington House. Dr. J. F. G. Wheeler, director of the Bermuda Marine Biological Station, gave a lecture, illustrated with coloured lantern slides, on the natural history of Bermuda. A number of zoological and botanical exhibits were shown in the library, including a series of manuscripts and printed documents, from the Society's archives, relating to the younger Linnaeus, and to his visit to England in 1781-82. The Botanical Department of the British Museum (Natural History) had on view a large series of coloured drawings of fungi of the genus *Russula*, and a selection of dried plants from British Columbia. Miss F. L. Stephens exhibited cultures and microscopical preparations of two species of the fungal genus *Neurospora* showing varying degrees of the 'sub-sexual' difference known as heterothallism. A selection of coloured fruits and seeds exhibited by the Royal Botanical Gardens, Kew, attracted much attention. Prof. G. D. Hale-Carpenter showed a series of butterflies with marks on, and mutilations of, the wings caused by the attacks of birds. Capt. J. G. Dollman exhibited a series of skins of certain antelopes showing the uniformity of pattern in the foetal and young animals, with diversity in the adults. Mr. J. Omer-Cooper had on view a living specimen of the crustacean *Apus*, hatched from mud taken from a pond in the New Forest. This crustacean had not been found in England for about half a century.

Rainfall Records and Drought Periodicity

MR. W. R. BALDWIN-WISEMAN, lecturer in hydraulics in the University of Western Australia, writing in reference to our leading article of August 4 on the "Government and Inland Water Survey", emphasises the need for an organised hydrographic service, and instances the Hydrographic Survey of the Po as one of the most efficient services in the world. From analyses of many lengthy records of

rainfall in his possession, he contends that there is little justification in many cases, and no justification in some, for the assumption that any 35-year-mean approximates fairly closely to the true mean, or that a 20 per cent deficiency adequately represents the average annual deficiency of the three driest years in a lengthy rainfall record. Consequently, water works planned on these assumptions may make a too generous allocation of compensation water, while making inadequate provision for a storage sufficient to tide over the contingencies arising from a prolonged, or frequently recurrent, drought. He goes on to point out that Dr. E. Huntington has demonstrated the existence of a climatic pulse of about 640 years, which is probably a multiple of the sunspot period of 11.2 years ($57 \times 11.2 = 638.4$); if A.D. 1372, the year of maximum sunspot activity in the Chinese record, which has now been unofficially maintained for nearly a thousand years, be taken as a nodal point in this pulse, previous points will have occurred about 543 B.C., A.D. 95, and A.D. 734—all four points being in periods of notorious aridity. If the sequence is maintained, the next occurrence may be expected about A.D. 2010, with a prevalence of drought conditions, either prolonged or frequently recurrent, towards the close of the present century.

The North-East Coast Institution

AT the annual general meeting of the North-East Coast Institution of Engineers and Shipbuilders held at Newcastle-upon-Tyne on October 19, the report for 1933-34 was submitted, and Mr. J. T. Batey delivered his presidential address. In spite of the severe depression in the shipbuilding industries, the membership of the Institution has been well maintained, several valuable papers have been read and attendance at meetings during the past year was the highest recorded. Among other matters referred to were the grant of armorial bearings, the Sir Charles Parsons Memorial and the opening on July 20, 1933, of the Municipal Museum of Science and Industry, the formation of which the Institution did much to promote. The honorary curator of the Museum is Capt. E. W. Swan, a member of the Institution. A part of Mr. Batey's address was devoted to the problem of using technical progress. Technical progress, he said, is like a fine machine; it has to be properly used or it may be dangerous. Mechanical science has outstripped progress in the science of living, and it is evident that in this field there will be many and startling developments before the Institution is a century old. To the question whether the suspension of scientific progress is conceivable, it might be replied that the advance of science is so inevitable that for all practical purposes we may regard it as one of the laws of life. The Institution's purpose, "the advancement of the sciences of engineering and shipbuilding", is a definite function of the organised form of society ruling to-day. The responsibility for the misuse or oversight of technical progress must be accepted by finance, commerce and the State, internationally. In the session just opening, the Institution, he said, would commemorate its jubilee, and he continued: