

Societies and Academies.

LONDON.

Royal Anthropological Institute, October 6.—Geza Roheim: Hungarian calendar customs. Three groups of customs connected with the calendar were discussed. In Hungarian winter dances a bull plays a conspicuous part. One of the performers may be called a bull, or the bull is a musical instrument used by these dancers. The identity of a demon and a musical instrument reminds us of primitive initiation ceremonies, and the Hungarian rites in question are actually connected with the initiation of lads. The fertility customs of St. George's day are based on the unconscious concept of birth, and it is in this sense that the Palilia, the Roman prototype of St. George's day, was the birthday of the community. The kings and queens of Whitsuntide in Hungary show that these embodiments of fertility are really the survivals of primitive divine kings, for even in the seventeenth and eighteenth centuries, Hungarian Whitsuntide kings enjoyed certain privileges and wielded authority over the lads of their village for a year.

NAPLES.

Academy of Physical and Mathematical Sciences.—Among the papers published in the issue of the *Rendiconti* of the Academy for April-August 1925, are the following: (1) Prof. R. Biazzo describes a modification of the thiocyanate method of determining the proportion of copper in commercial copper sulphate, in which the excess of thiocyanate used is ascertained by titration with permanganate in the presence of sulphuric acid. The iron present is previously eliminated by oxidation with chlorine and precipitation as ferric hydroxide, and, for the reduction of the copper to the cuprous state, potassium cyanide must be used in place of sulphurous acid. (2) Arnaldo Piutti is unable to find any relationship between the hafnium contents of samples of zircon from different localities and the densities of the minerals, but confirms von Hevesy's observation that a connexion exists between the proportion of hafnium present and the degree of radioactivity. (3) From the capacity of certain samarium minerals to form homogeneous mixed crystals with the corresponding compounds of calcium, strontium, and lead, Dr. G. Carobbi concludes that the isomorphism of samarium towards metals of the isomorphogenic calcium group is more pronounced than that exhibited by other metals of the cerium group. Such conclusion is in accord with the existence of the chloride, SmCl_2 , and the iodide, SmI_2 . (4) Antonio Carrelli extends to the phenomenon of diffusion of electromagnetic waves the method given by Lorentz for visible radiations and for X-rays, account being taken of the index of refraction, the existence of which Compton has demonstrated for such waves. In this manner he arrives at Rayleigh's classic formula for the coefficient of diffusion, and shows also that, in the case of X-rays, this formula coincides with that derived by Debye on the hypothesis that the wave-length of the radiations is not excessively small.

ROME.

Royal Academy of the Lincei: Communications received during the vacation.—Achille Russo: A siderophilic substance emitted from the micro-nucleus of the impure gametes derived from the second division of the impure gametogens in *Cryptochilum echini*, and its destination.—Alfredo Sabbatini: Singularity of the solution of integral equations with variable limits.—Lubomir Tchacaloff: A general

property of differential equations (a theorem of Ernesto Pascal).—B. Caldonazzo: Movements of a liquid which leave unaltered the local distribution of the pressures.—E. Persico: Experiments on the amplitude of the oscillations produced by a three-electrode lamp.—Carlo Perrier: Method for the determination of the principal refractive indices of birefractive substances by means of Federow's plate.—Luigi Rolla and Giorgio Piccardi: Chemical statics of electronic phenomena. A simple method is outlined for the determination of the dissociation coefficient and the equilibrium constant of the reaction, $A \rightleftharpoons A^{++}$ electron.—G. Bargellini: β -Phenylcoumarins.—G. Bargellini and P. Leone: Glucosides of chalkones.—G. R. Levi and G. Natta: Crystalline structure of perovskite. Röntgenographic examination by the Debye-Scherrer method indicates for perovskite a face-centred cubic lattice, but the symmetry is only pseudo-cubic, the pseudo-cube being composed of the two rhombic forms (001) and (110). The apparently higher symmetry of the crystals is possibly the result of superposition of differently orientated lamellæ.—R. Perotti: Root bacilli of *Diplotaxis erucoides*.—Roberto Savelli: A collateral effect, and a rapid method of study of the ionolysis of pollen.—P. Pasquini: Genesis of the pecten in the development of the eye in birds.—C. Jucci: Hereditary behaviour of the type of larval development in crosses between silkworms of three and four mutations.—Ettore Remotti: Embryonic metabolism of the Teleostei. The amino-acids derived from the degradation of the capsule and their relation to the embryo.—Mariannina Levi: The excitability of the retina in relation to the duration of the stimulus.

Official Publications Received.

Quaternary Climates. Geologic History of Lake Lahontan, by J. Claude Jones; On the Pleistocene History of the Great Basin, by Ernst Antevs; The Big Tree as a Climatic Measure, by Ernst Antevs; Tree Growth and Climatic Interpretations, by Ellsworth Huntington. (Publication No. 352.) Pp. v+212+10 plates. (Washington: Carnegie Institution.)

Physiological Features of Roots, with Especial Reference to the Relation of Roots to Aeration of the Soil. By William Austin Cannon. With a Chapter on Differences between Nitrogen and Helium as Inert Gases in Anaerobic Experiments on Plants, by Edward Elway Free. (Publication No. 368.) Pp. iii+168. (Washington: Carnegie Institution.)

Ministerio de Agricultura de la Nación República Argentina. Memoria correspondiente al ejercicio de 1924: Dirección Meteorológica. Pp. 17. (Buenos Aires.)

Union of South Africa: Department of Agriculture. Bulletin No. 2 of 1925: Some Further Remarks on Tobacco Cultivation for Nicotine. By J. Vernell Cutler and J. J. Theron and J. du P. Oosthuizen. Pp. 23. (Pretoria: Government Printing and Stationery Office.) 3d.

S.A. Sugar Association. Proceedings of the Third Annual Congress held on March 25th, 26th and 27th, 1925, at Umbogintwini, Mount Edgecombe and Durban. Pp. 72. (Durban: South African Sugar Association.)

Proceedings of the Royal Irish Academy. Vol. 37, Section B, No. 6: The Brachopoda of the Coasts of Ireland. By Anne L. Massy. Pp. 37-46. 1s. Vol. 37, Section B, Nos. 7, 8: The Action of Hydrazine on the Halogen Derivatives of Malonamides and Acetoacetic Esters, by Dr. Edmund Langley Hirst, Dr. Alexander Killen Macbeth and David Traill; Condensation Reactions of Indoxyl and 3-Oxy (1) thionaphthen, by Dr. Alexander Killen Macbeth and Dr. James Craik. Pp. 47-57. 1s. (Dublin: Hodges, Figgis and Co.; London: Williams and Norgate, Ltd.)

Contributions to Palaeontology from the Carnegie Institution of Washington. Additions to the Tertiary History of the Pelagic Mammals on the Pacific Coast of North America. By Remington Kellogg. (Publication No. 348.) Pp. iii+120+13 plates. (Washington: Carnegie Institution.)

History of Agriculture in the Northern United States, 1620-1860. By Dr. Percy Wells Bidwell and Prof. John I. Falconer. (Publication No. 358.) Pp. xii+512. (Washington: Carnegie Institution.)

The Volcanic Activity and Hot Springs of Lassen Peak. By Arthur L. Day and E. T. Allen. (Publication No. 360.) Pp. viii+190+13 plates. (Washington: Carnegie Institution.)

Reversible Variations in Volume, Pressure and Movements of Sap in Trees. By D. T. MacDougal. (Publication No. 365.) Pp. iii+90+5 plates. (Washington: Carnegie Institution.) 1 dollar.

Contributions to the Geology and Palaeontology of the West Indies. Miocene Mollusks from Bowden, Jamaica: Pelecypods and Scaphopods. By Wendell P. Woodring. (Publication No. 366.) Pp. vi+222+28 plates. (Washington: Carnegie Institution.)

Annual Report for the Year 1924 of the South African Institute for Medical Research, Johannesburg. Pp. 81+2 plates. (Johannesburg.)