

Kilian: The composition of the Miocene conglomerates of the French sub-alpine chains.—**L. Jouane**: The elasticity of pure cement. Measurements were made of the flexion of small test pieces of cement when submitted to small forces, no permanent deformation resulting. The strains were proved to be proportional to the stresses applied, and the modulus calculated from various test pieces was constant within 1 per cent.—**H. Guilleminot**, **H. Cheron**, and **R. Biquard**: An X-fluorometer with radio-luminescent standard.—**P. Georgevitch**: Study of the sexual generation of a brown alga.—**H. Agulhon** and **R. Legroux**: Contribution to the study of the vitamins utilisable in the culture of micro-organisms. Application to the influenza bacillus (*B. Pfeiffer*).—**Sir Almroth E. Wright**: The production of non-specific bactericidal substances by means of anti-staphylococcal and anti-streptococcal vaccines *in vivo* and *in vitro*.—**R. D. de la Rivière**: Is the poison of influenza capable of passing through a filter? Blood from influenza patients was defibrinated and filtered through a Chamberland filter (*L₂*). A portion of the filtrate injected under the skin produced influenza symptoms in the author, which are described in detail. A second injection ten days after the first gave rise to no morbid symptom.—**C. Nicolle** and **C. Lebailly**: Some experimental ideas on the virus of influenza. The bronchial expectoration in cases of influenza collected during the acute period is virulent. The ape is sensible to the infection.—**J. Nageotte** and **L. Sencert**: The utilisation of dead grafts for the surgical repair of tissues of a conjunctive nature.

BOOKS RECEIVED.

The Illinois and Michigan Canal: A Study in Economic History. By Prof. J. W. Putnam. Pp. xiii+213. (Chicago: University of Chicago Press.) 2 dollars.

The Student's Handbook to the University and Colleges of Cambridge. Seventeenth edition, revised to June 30, 1918. Pp. vi+717. (Cambridge: At the University Press.) 6s. net.

The Iron and Steel Institute. Carnegie Scholarship Memoirs. Vol. ix. Pp. iv+169. (London: E. and F. N. Spon, Ltd.)

State of Connecticut. Public Document No. 24:—Forty-first Annual Report of the Connecticut Agricultural Experiment Station. Pp. xvi+510. (New Haven, Conn.)

University of London. University College. Abridged Calendar. Session 1918-19. Pp. cxxx+250. (London: Taylor and Francis.)

DIARY OF SOCIETIES.

THURSDAY, NOVEMBER 14.

ROYAL SOCIETY, at 4.30.—**A. Mallock**: Sounds produced by Drops falling on Water.—**C. H. Hardy** and **S. Ramanujan**: The Coefficients in the Expansions of certain Modular Functions.—**Hon. R. J. Strutt**: The Light Scattered by Gases; Its Polarisation and Intensity.—**Dr. F. Horton** and **Ann C. Davies**: An Investigation of the Ionising Power of the Positive Ions from a glowing Tantalum Filament in Helium. OPTICAL SOCIETY, at 8.—**T. Smith**: Some Generalised Forms of an Optical Equation.—**H. S. Ryland**: The Manufacture of Binoculars. MATHEMATICAL SOCIETY, at 5.—Annual General Meeting.—**Prof. H. M. Macdonald** (Retiring President): Presidential Address.—**Prof. M. J. M. Hill**: The Use of a Property of Jacobians to Determine the Character of any Solution of an Ordinary Differential Equation of the First Order, or of a Linear Partial Differential Equation of the First Order.—**Prof. H. J. Priestley**: The Roots of a Certain Equation in Spherical Harmonics.—**J. Hodgkinson**: A Detail in Conformal Representation.—**T. A. Broderick**: The Product of Semi-convergent Series.—**Dr. W. P. Milne**: A Simple Condition for Co-apolar Triangles.

FRIDAY, NOVEMBER 15.

INSTITUTION OF MECHANICAL ENGINEERS, at 6.—*Ajourned Discussion*: **Prof. C. A. Edwards** and **F. W. Willis**: A Law Concerning the Resistance to Penetration of Metals which are Capable of Plastic Deformation, and a New Hardness Scale in Fundamental Units.—**R. G. C. Batson**: The Value of the Indentation Method in the Determination of Hardness; and **Dr. W. C. Unwin**: The Ludwik Hardness Test.—**T. T. Heaton**: Electric Welding.

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MONDAY, NOVEMBER 18.

ROYAL GEOGRAPHICAL SOCIETY, at 5.—Exhibition of Captured War Maps.

TUESDAY, NOVEMBER 19.

BRITISH ASSOCIATION GEOGRAPHICAL COMMITTEE (Royal Astronomical Society), at 5.—**R. D. Oldham**: The Constitution of the Earth's Interior. INSTITUTION OF PETROLEUM TECHNOLOGISTS, at 5.30.—**W. R. Ormandy**: The Motor Fuel Problem. INSTITUTION OF CIVIL ENGINEERS, at 5.30.—**R. B. Joyner**: The Tata Hydro-electric Power-supply Works, Bombay. ZOOLOGICAL SOCIETY, at 5.30.—The Secretary: Report on the Additions to the Society's Menagerie in the Month of October, 1918.—**Miss K. Lander**: Exhibition of Skeletons, prepared by the "Trypsin" Method.—**E. Hatschek**: Notes on Investigations into the Forms of Drops and Vortices of Gelatin in Various Coagulants.—**Dr. D. M. S. Watson**: Seymouria, the most primitive known Reptile.

WEDNESDAY, NOVEMBER 20.

GEOLOGICAL SOCIETY, at 5.30.—**R. Hansford Worth**: The Geology of the Meldon Valleys, near Okehampton, on the Northern Verge of Dartmoor. ROYAL SOCIETY OF ARTS, at 4.30.—**A. A. Campbell Swinton**: Science and the Future.

ENTOMOLOGICAL SOCIETY, at 8.

ROYAL METEOROLOGICAL SOCIETY, at 5.—**R. DeC. Ward**: The Larger Relations of Climate and Crops in the United States.—**Capt. C. J. P. Cave** and **J. S. Dines**: Soundings with Pilot Balloons in the Isles of Scilly, November and December, 1911.

THURSDAY, NOVEMBER 21.

ROYAL SOCIETY, at 4.30.—*Probable Papers*: **W. Stiles** and **Dr. F. Kidd**: (1) The Influence of External Concentration on the Position of the Equilibrium attained in the Intake of Salts by Plant Cells; (2) The Comparative Rate of Absorption of various Salts by Plant Tissue.—**G. Marinisco**: Recherches Anatomico-Cliniques sur les Névromes d'Amputations douloureuses: Nouvelles Contributions à l'Etude de la Régénération nerveuse et du Neurotropisme. LINNEAN SOCIETY, at 5.—**E. S. Goodrich**: A Fatherless Frog, with remarks on Artificial Parthenogenesis.—**Miss Muriel Bristol**: A Review of the Genus *Chlorochytrium*, Cohn.—**A. S. Kennard** and **B. B. Woodward**: The Linnean Species of Non-marine Mollusca that are represented in the British Fauna, with Notes on the Specimens of these and other British Forms in the Linnean Collection. ROYAL SOCIETY OF ARTS, at 4.30.—**Sir Everard im Thurn**: The Present State of the Pacific Islands. INSTITUTION OF MINING AND METALLURGY, at 5.30.—**R. R. Kahan**: Refining Gold Bullion with Chlorine Gas and Air.—**A. Yates**: Effect of Heating and Quenching Cornish Tin Ores before Crushing.—**R. J. Harvey**: The Development of Galena Flotation at the Central Mine, Broken Hill. INSTITUTION OF ELECTRICAL ENGINEERS, at 6.—**J. H. Shaw**: The Use of High Pressure and High Temperature Steam in Large Power Stations. INSTITUTION OF MINING AND METALLURGY, at 5.30.

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