

tumour is young; the resorption of a large tumour causes the death of the animal, probably by poisoning.—**Cl. Regaud** and **Th. Nogier**: The complete and definitive sterilisation of the testicles of the rat, without any lesion of the skin, by a single application of X-rays filtered through aluminium.—**Fred Vies**: The value of muscular striæ from the spectrographic point of view.—**Jules Auclair** and **Paul Braun**: Two cases of Maltese fever probably contracted at Paris. Both cases, which were definitely proved to be true Maltese fever, were probably contracted from handling sheep skins.—**M. Ledentu**: Vascular tumours and aneurisms of the bones.—**P. Bonnier**: The bulbar centres and intestinal diaphylaxy.—**B. Collin**: Some remarks on two new species, *Dendrosomides paguri* and *Podophrya fixa*.—**Gabriel Arthaud**: The salivary spirochaetes.—**J. Savornin**: The palæogeographical evolution of Cape Bon and the direction of the folds of the Atlas, considered as the result of two orthogonal orogenic actions.—**Em. de Martonne**: The unequal distribution of glacial erosion in the bed of Alpine glaciers.—**E. Noël**: Tunisian hydrogeology.—**Henryk Arcowski**: The dynamics of climatic variations.

GÖTTINGEN.

Royal Society of Sciences.—The *Nachrichten* (physico-mathematical section), part iii., for 1909, contains the following memoirs communicated to the society:—

July 17.—**H. Bohr**: The summability of Dirichlet series.—**D. Hilbert**: The theory of conformal representation.—**D. Hilbert**: The form of a surface of the fourth order.
July 31.—**A. Coehn** and **U. Raydt**: The quantitative validity of the law of distribution of charge between dielectrics in contact.—**C. Runge**: The determination of position in balloons.—**P. Koebe**: The uniformisation of given analytic curves (iv.).

DIARY OF SOCIETIES.

THURSDAY, JANUARY 6.

RÖNTGEN SOCIETY, at 8.15.—(1) A Comparison between the Skotographic and Electroscopic Effects of certain Animal Substances with the same Effects of Uranium, Thorium, &c.; (2) Retardation of Electroscopic Leak by Means of Recognised Radio-active and other Substances; (3) Masked Radio-activity; (4) Influence of Radio-active and certain other Substances upon the Division of Animal Cells: **Dr. W. S. Lazarus-Barlow**.

FRIDAY, JANUARY 7.

INSTITUTION OF MECHANICAL ENGINEERS, at 8.—The Application of the Pitot Tube to the Testing of Impulse Water-wheels: **W. R. Eckart**.—An Account of a Visit to the Power Plant of the Ontario Power Co. at Niagara Falls: **C. W. Jordan**.

INSTITUTION OF CIVIL ENGINEERS, at 8.—Oil Fuel: **D. S. Richardson**.

MONDAY, JANUARY 10.

ROYAL GEOGRAPHICAL SOCIETY, at 8.30.—Travels of a Naturalist in South-west Africa: **Prof. H. H. W. Pearson**.

VICTORIA INSTITUTE, at 4.30.—Modern Conceptions of the Universe: **G. F. C. Searle, F.R.S.**

TUESDAY, JANUARY 11.

ILLUMINATING ENGINEERING SOCIETY, at 8.—Glare, its Causes, and Effects: **Dr. J. H. Parsons**.

INSTITUTION OF CIVIL ENGINEERS, at 8.—The Design of Rolling Stock for Smooth-trail Working on Heavy Gradients: **F. W. Bach**.

WEDNESDAY, JANUARY 12.

GEOLOGICAL SOCIETY, at 8.—The Igneous and Associated Sedimentary Rocks of the Glensaul District (County Galway): **C. I. Gardiner** and **Prof. S. H. Reynolds**. With Palæontological Notes by **F. R. C. Reed**.—The Gneisses and Altered Dacites of the Dandenong District (Victoria), and their Relations to the Dacites and to the Grano-Diorites of the Area: **Prof. E. W. Skeats**.—Recent Improvements in Rock-section Cutting Apparatus: **H. J. Grayson**.

THURSDAY, JANUARY 13.

ROYAL SOCIETY, at 4.30.—*Probable Papers*: On the Atomic Weight of Strontium: **Sir Edward Thorpe, C.B., F.R.S.**, and **A. G. Francis**.—On the Approximate Arithmetical Solution by Finite Differences of Physical Problems involving Differential Equations, with an Application to the Stresses in a Masonry Dam: **L. F. Richardson**.—On a Method of Determining the Viscosity of Gases, especially those available only in Small Quantities: **A. O. Rankine**.—Recombination of Ions at Different Temperatures: **P. Phillips**.—On the Electricity of Rain and Snow: **Dr. G. C. Simpson**.—On the Polarisation of X-Rays compared with their Power of Exciting High Velocity Kathode Rays: **L. Vegard**.

MATHEMATICAL SOCIETY, at 5.30.—The Transformations of Coordinates which can be used to transform One Physical Problem into Another: **H. Bateman**.—On Homogeneous Oscillation: **Dr. W. H. Young**.—On the Determination of a Semi-continuous Function from a Countable Set of Values: **Dr. W. H. and Mrs. Young**.—Note on a Former Paper on the Theory of Divergent Series: **G. H. Hardy**.—On the Expression of

a Certain Function by Means of a Series of Polynomials: **Dr. H. F. Baker**.—On the Double Sixers of a Cubic Surface: **Dr. H. F. Baker**.

INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—Lord Kelvin's Work in Telegraphy and Navigation (*Second Kelvin Lecture*): **Prof. J. A. Ewing, C.B., F.R.S.**

FRIDAY, JANUARY 14.

MALACOLOGICAL SOCIETY, at 8.—Note on *Helix desertorum*: **Mrs. G. B. Longstaff**.—Description of *Thersites (Glyptorhagada) Hillierti*, n.sp., from Central South Australia: **E. A. Smith**.—Note on *Athoracophorus Schaumlandti*: **Henry Suter**.—The Ampullaridæ of the Eastern Hemisphere. Description of New Species of *Donovania*, *Scutellina*, *Fissurella*, and *Pisania*: **G. B. Sowerby**.—Marine Mollusca from the Kermadec Islands. Notes on Polyplacophora, chiefly Australasian: **T. E. Iredale**.—Helicoids from New Guinea and Description of a New Species of Papua: **G. K. Gude**.

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