

appears to take place in the nervous system, especially in the nerve centres.—The determination of the perceptible minimum and the duration of luminous perception in persons of weak sight, by M. S. **Durand**.—On mountain sickness, by M. **Kronecker**.—On the modifications induced in the respiration by the altitude of Mt. Blanc, by M. J. **Vallot**. The relation between the volume of air respired and the time spent at the summit is shown graphically, and also the variation in the weight of air breathed.—On a relation between the work and the so-called statical work equivalent on the ergograph, by M. Charles **Henry** and Mlle. J. **Ioteyko**.—Researches on the rôle of the interstitial gland of the testicle. Experimental compensating hypertrophy, by MM. P. **Ancel** and P. **Bouin**.—Phototropism in the higher Artiozoa, by M. Georges **Bohn**.—The action of anethol upon the organism, by MM. E. **Varenne**, J. **Roussel** and L. **Godefroy**. Anethol shows no toxic effects, and may be safely used as a therapeutical agent.—The action of radium upon different tissues, by M. J. **Danysz**. The tissues, and especially the epithelial tissues of young animals, are much more sensitive to the action of radium rays than the tissues of adults.—On a consequence of cross-fertilisation, by M. Leclerc **du Sablon**.—On a true hybrid of chasselas by *Ampelopsis hederacea*, by M. **Grille**.—On the rôle of calcium oxalate in the nutrition of plants, by M. **Amar**. The lime (in the form of nitrate) necessary to the constitution of the plant is entirely assimilated up to a certain proportion, depending on the species; above this proportion the excess of lime is eliminated in the form of crystals of calcium oxalate.—On a disease of the leaves of the tobacco plant, by M. H. **Bouygues**.—On the Glacial deposits of the Garonne, by M. L. A. **Fabre**.—The geology of the western Alps, by M. Emile **Haug**.—Contribution to the study of the basaltic rocks of East Africa, by M. H. **Arsандаux**.—On the lakes of the Upper Engadine, by M. André **Delebecquo**.—On the relation which exists between the proportion of gluten contained in different wheats and the proportion of total nitrogenous materials, by M. E. **Fleurent**.

DIARY OF SOCIETIES.

THURSDAY, JANUARY 7.

ROYAL INSTITUTION, at 3.—Extinct Animals: Prof. Ray Lankester, F.R.S.

RÖNTGEN SOCIETY, at 8.30.—The Revelations of Radium: Dr. G. B. Batten.

FRIDAY, JANUARY 8.

ROYAL ASTRONOMICAL SOCIETY, at 5.—Transformation of Hansen's Tables: P. H. Cowell.—Note on the Use of Long Focus Mirrors for Eclipse Work: H. H. Turner.—New Double Stars detected with the 17 inch Reflector during the Year 1903: Rev. T. E. Espin.—Ephemeris for Physical Observations of Jupiter, 1904-5: A. C. D. Crommelin.—The Rotation Period of Saturn in 1903: W. F. Denning.—The "Great" Magnetic Storms, 1875 to 1903, and their Association with Sun-spots, as Recorded at the Royal Observatory, Greenwich, communicated by the Astronomer Royal: E. W. Maunder.—suggested Connection between Sun-spot Activity and the Secular Change in Magnetic Declination: Mrs. E. W. Maunder.—On the Chromatic Correction of Object Glasses: A. E. Conrady.—The Aurora and Magnetic Disturbance: William Ellis.—*And, time permitting*, Discussion on Methods of Reproducing Astronomical Photographs.

ROYAL GEOGRAPHICAL SOCIETY, at 4.—Adventures in Antarctic Lands and Seas: Lieut. Ernest Shackleton. (Lecture to Young People.)

SATURDAY, JANUARY 9.

ROYAL INSTITUTION, at 3.—Extinct Animals: Prof. Ray Lankester, F.R.S.

MONDAY, JANUARY 11.

ROYAL GEOGRAPHICAL SOCIETY, at 8.30.—Exploration on the Southern Abyssinian Border: Captain Philip Maud.

VICTORIA INSTITUTE, at 4.30.—Ancestral Worship: Rev. Arthur Elwin.

TUESDAY, JANUARY 12.

ROYAL INSTITUTION, at 5.—The Development and Transformations of Animals: Prof. L. C. Miall, F.R.S.

INSTITUTION OF CIVIL ENGINEERS, at 8.—The Electrical Re-construction of the South London Tramways on the Conduit System: Alexander Millar.

WEDNESDAY, JANUARY 13.

SOCIETY OF ARTS, at 5.—Navigation of the Air: Eric S. Bruce.

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THURSDAY, JANUARY 14.

INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—The City and South London Railway; Working Results of the Three Wire System applied to Traction, &c.: P. V. McMahon. (Adjourned discussion).—On the Magnetic Dispersion in Induction Motors, and its Influence on the Design of these Machines: Dr. Hans Behn-Eschenburg.

ROYAL INSTITUTION, at 5.—The Flora of the Ocean: G. R. M. Murray F.R.S.

MATHEMATICAL SOCIETY, at 5.30.—On Various Systems of Piling: Prof. J. D. Everett.—The Differential Equation

$$\frac{\partial^2 V}{\partial x_1^2} + \frac{\partial^2 V}{\partial x_2^2} + \dots + \frac{\partial^2 V}{\partial x_n^2} = 0:$$

H. Bateman.—On the Notion of Lines of Curvature in the Theory of Surfaces: Dr. G. Prasad.—On Groups of Order  $p^a q^b$ : Prof. W. Burnside.

SOCIETY OF ARTS, at 4.30.—The Presidency of Bombay: Sir William Lee-Warner. K.C.S.I.

FRIDAY, JANUARY 15.

ROYAL INSTITUTION, at 9.—Shadows: Lord Rayleigh.

INSTITUTION OF MECHANICAL ENGINEERS, at 8.

SATURDAY, JANUARY 16.

ROYAL INSTITUTION, at 3.—British Folk Song: J. A. F. Maitland.

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