

forms and sarcode forms. All these forms exist in epithelioma, carcinoma and sarcoma, but the last-named contains especially the microbial forms and the granulations.—Remarks on the Bloch-appendices in the siluroids of genus *Aspreto*, by M. Léon Vaillant.—On the place of the sponges in classification, by M. Yves Delage.—Influence of the X-rays on germination, by MM. Maldiney and Thouvenin. From experiments upon *Convolvulus arvensis*, *Lepidium sativum*, and *Panicum miliaceum*, it would appear that the X-rays hasten germination.—The melanosis of the mandarin orange, by M. Trabut.—Detection and rapid estimation of manganese in plants and vegetable earths by a colorimetric method, by M. P. Pichard. The method is based upon the ignition of the ash with an alkaline carbonate, and subsequent formation of permanganate by the use of lead peroxide and nitric acid.—On the conglomerate of the Amône in the Swiss Ferret valley, by MM. L. Duparc and F. Pearce.—On the formation of anhydrite by the calcination of gypsum at high temperatures, by M. A. Lacroix.—On the origin of the overlapping layers in the region of Ubaye, by MM. W. Kilian and E. Haug.—On some phenomena of fluvial erosion and corrosion, by M. Jean Brunhes.

## DIARY OF SOCIETIES.

### THURSDAY, FEBRUARY 24.

ROYAL SOCIETY, at 4.30.—Meeting for Discussion.—Subject: The Scientific Advantages of an Antarctic Expedition. The Discussion will be opened by Dr. John Murray, F.R.S.

INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—On the Manufacture of Lamps and other Apparatus for 200 volts Circuits: G. Binswanger, Byng.

### FRIDAY, FEBRUARY 25.

ROYAL INSTITUTION, at 9.—The Theory of Colour Vision applied to Modern Colour Photography: Captain W. de W. Abney, C.B., F.R.S.

INSTITUTION OF CIVIL ENGINEERS, at 8.—The Problem of Train Resistance: C. E. Wolff.

### SATURDAY, FEBRUARY 26.

ROYAL INSTITUTION, at 3.—The Structure of Instrumental Music: W. H. Hadow.

PHYSICAL SOCIETY (Eton College), at 4.—The Rev. T. C. Porter will describe (1) a New Theory of Geysers; (2) a New Method of Viewing Newton's Rings; (3) Experiments bearing on the Sensation of Light; (4) a Method of Viewing Lantern Projections in Stereoscopic Relief; (5) Winter Observations on the Shadow of El Teide, with a New Method for Measuring approximately the Diameter of the Earth; (6) Temperature of the Water of Niagara.

### MONDAY, FEBRUARY 28.

SOCIETY OF ARTS, at 8.—The Principles of Design in Form: Hugh Stannus.

ROYAL GEOGRAPHICAL SOCIETY, at 8.30.—The Annual Range of Temperature in the Surface Waters of the Ocean, and its Bearing on Oceanographical Problems: Dr. John Murray, F.R.S.

INSTITUTE OF ACTUARIES, at 5.30.—The Relation of the Actuarial Profession to the State: J. Nicoll.

### TUESDAY, MARCH 1.

ROYAL INSTITUTION, at 3.—The Simplest Living Things: Prof. E. Ray Lankester, F.R.S.

ZOOLOGICAL SOCIETY, at 8.30.—On the Perforate Corals collected by the Author in the South Pacific: J. Stanley Gardiner.—The Myology of the Terrestrial Carnivora, Part 2: Prof. B. C. A. Windle and F. G. Parsons. On the Brain and some other Points in the Anatomy of *Bassaris*: F. E. Beddard, F.R.S.

INSTITUTION OF CIVIL ENGINEERS, at 8.—Papers to be further discussed: The Theory, Design, and Practical Working of Alternate-Current Motors: Llewelyn B. Atkinson.—Dublin Electric Tramway: H. F. Parshall.

RÖNTGEN SOCIETY, at 8.—Photographic Activity and Penetration of Röntgen Rays at Different Vacua: J. H. Gardiner.—Other Papers by Wilson Noble and Hall Edwards.—Mr. Isenthal will show some New Apparatus.

### WEDNESDAY, MARCH 2.

SOCIETY OF ARTS, at 8.—Kites: their Theory and Practice: Captain B. F. S. Baden-Powell.

### THURSDAY, MARCH 3.

ROYAL SOCIETY, at 4.30.—*Probable Papers*: The Relationship of Variations of the Ground Water Level to the Incidence of Malarial Fevers in Chotta Nagpur, Bengal: Dr. L. Rogers.—On the Depletion of the Endosperm of *Hordeum vulgare* during Germination: H. T. Brown, F.R.S., and F. Escombe.—Experimental Observations on the Early Degenerative Changes in the Sensory End Organs of Muscles: Dr. F. E. Batten.

ROYAL INSTITUTION, at 3.—Recent Researches in Magnetism and Diamagnetism: Prof. J. A. Fleming, F.R.S.

LINNEAN SOCIETY, at 8.—On the Sense Organs of the Lateral Line in certain Fishes: F. J. Cole.—On the Occurrence of *Carex helvola* in Britain: G. C. Druce.—On Arctic Spiders from Franz Josef Land: Rev. O. Pickard-Cambridge.

CHEMICAL SOCIETY, at 8.

### FRIDAY, MARCH 4.

ROYAL INSTITUTION, at 9.—Some Recent Results of Physico-Chemical Chemistry: Prof. T. E. Thorpe, F.R.S.

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## BOOKS, PAMPHLETS, and SERIALS RECEIVED.

BOOKS.—Andrée and his Balloon: H. Lachambre and A. Machuron (Constable).—Year-Book of the Royal Society, No. 2, 1897-98 (Harrison).—Meteorology in Mysore, 1896: J. Cook (Bangalore).—Magnets and Electric Currents: Prof. J. A. Fleming (Spon).—Twenty-fourth Annual Report of the Local Government Board, 1894-95. Supplement: Inland Sanitary Survey, 1893-95 (Eyre).—Report of the Meteorological Service of the Dominion of Canada, 1890 and 1895: R. T. Stupart (Ottawa).—Storm and Sunshine in the Dales: P. H. Lockwood (E. Stock).—Pike and Perch: A. Jardine (Lawrence).—The Kingdom of the Yellow Robe: E. Young (Constable).—Lessons with Plants: L. H. Bailey (Macmillan).—Through China with a Camera: J. Thomson (Constable).—Proceedings of the London Mathematical Society, Vol. xviii. (Hodgson).—Leçons sur l'Intégration des Equations: E. Goursat, 2 Vols. (Paris, Hermann).—Œuvres Scientifiques de L. Lorenz, Tome 1, Deux Fasc. (Copenhagen, Lehmann).—A Treatise on Universal Algebra, with Applications: A. N. Whitehead, Vol. 1 (Cambridge University Press).—Peneroplis: F. Dreyer (Leipzig, Engelmann).

PAMPHLETS.—The Twelfth and Concluding Memoir on the Theory of Screws: Sir R. Ball (Dublin).—Die Geometrisch-Optischen Täuschungen: W. Wundt, No. 2 (Leipzig, Teubner).—A Suggested Improvement of the Current Theories of the Tides: J. H. S. Moxley (Rivingtons).—Vaccination a Delusion: Dr. A. R. Wallace (Sonnenschein).

SERIALS.—National Geographic Magazine, January (Washington).—Monthly Weather Review, November (Washington).—Zoologist, February (West).—Proceedings of the Bristol Naturalists' Society, new series, Vol. viii. Part 2 (Bristol).—Studies from the Yale Psychological Laboratory, Vol. 4, 1896 (New Haven).—Journal of the Franklin Institute, February (Philadelphia).—Astrophysical Journal, January (Chicago).—Journal of the Chemical Society, February (Gurney).—American Anthropologist, November and December (Washington).—Proceedings of the Indiana Academy of Science 1896 (Indianapolis).

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