

deposited electrolytically. It appeared that when the deposit was made from nitrate of bismuth the phenomenon was as marked as it is with cast plates of the metal, whereas when deposited from the tartrate the phenomenon was either extremely feeble or non-existent. The asymmetry of the phenomenon on reversal of the magnetic field was explained by the author as due to the influence exerted by the magnetic field on the electric conductivity of the metal. He further regarded the difference in behaviour of the metallic film as precipitated, on the one hand, from the nitrate, and on the other, from the tartrate or citrate, as due to the fact that in the case of the latter salts the bismuth is mixed with carbon, whereas in the case of the nitrate the metal is deposited in a pure state.

DIARY OF SOCIETIES.

LONDON.

THURSDAY, MAY 16.

ROYAL SOCIETY, at 4.30.—On Measurements of Small Strains in the Testing of Materials and Structures: Prof. Ewing, F.R.S.—The Electrical Measurement of Starlight. Observations made at the Observatory of Daramona House, Co. Westmeath, in April 1895. Preliminary Report: Prof. G. M. Minchin.—The Complete System of the Periods of a Hollow Vortex Ring: H. C. Pocklington.—India's Contribution to Geodesy: General Walker, F.R.S.

CHEMICAL SOCIETY, at 8.—Ballot for the Election of Fellows.—Kjeldahl's Process for the Determination of Nitrogen; Dr. Bernard Dyer.—The Action of Nitrous Acid on 1:4:2 Dibromamine: Prof. Meldola, F.R.S., and E. R. Andrews.—Derivatives of Succinyl and Phthalyl Dithiocarbamides: Prof. Dixon and Dr. Doran.

ROYAL INSTITUTION, at 3.—The Liquefaction of Gases: Prof. J. Dewar, F.R.S.

SOCIETY OF ANTIQUARIES, at 8.30.

FRIDAY, MAY 17.

QUEKETT MICROSCOPICAL CLUB, at 8.

EPIDEMIOLOGICAL SOCIETY.—Paper by Dr. Washbourn.

SATURDAY, MAY 18.

LONDON GEOLOGICAL FIELD CLASS (Cannon Street Station), at 2.17.—Excursion to view Escarpment Valleys from the Weald to Chalk.

GEOLOGISTS' ASSOCIATION (Cannon Street Station), at 1.35.—Excursion to Betchworth and Headley.

ESSEX FIELD CLUB (Chingford, 2 p.m., and High Beach, 4 p.m.).—Inspection of Forest, and Paper by Mr. E. N. Buxton, on Plan for forming a Protected Area for certain Birds in Old Waltham Forest District.

MONDAY, MAY 20.

SOCIETY OF ARTS, at 8.—Japanese Art Industries: Dr. Ernest Hart.

ROYAL GEOGRAPHICAL SOCIETY, at 8.45.—Meeting to Commemorate the Fiftieth Anniversary of the Sailing of the Arctic Expedition under Sir John Franklin.

VICTORIA INSTITUTE, at 4.30.—Prof. E. Hull, F.R.S.

MEDICAL SOCIETY, at 8.30.

TUESDAY, MAY 21.

ROYAL INSTITUTION, at 3.—Thirty Years' Progress in Biological Science (II): Prof. E. Ray Lankester, F.R.S.

SOCIETY OF ARTS, at 8.—Commercial Education in Belgium: Prof. William Layton.

ZOOLOGICAL SOCIETY, at 8.30.—On the Ornithological Collections made by Dr. Donaldson Smith during his Recent Expedition in Somaliland and Gallaland: Dr. R. Bowdler Sharpe.—A Synopsis of the Genera and Species of Apodal Batrachians, with Descriptions of a New Genus and Species (*Bdellophis vittatus*): G. A. Boulenger, F.R.S.—List and Distribution of the Land-Mollusca of the Andaman and Nicobar Group of Islands in the Bay of Bengal, with Descriptions of some New Species: Lieut.-Colonel H. H. Godwin-Austen, F.R.S.—On a New Species of Hedgehog from Somaliland: Dr. J. Anderson, F.R.S.

INSTITUTION OF CIVIL ENGINEERS, at 8.—Last Ballot for Members for the Session.

ROYAL STATISTICAL SOCIETY (Royal United Service Institution), at 5.—Municipal Finance: E. Orford Smith.

ROYAL PHOTOGRAPHIC SOCIETY, at 8.—Apparatus for Process Photography: Wm. Gamble.

ROYAL VICTORIA HALL, at 8.—The History of a Myth: Prof. Sollas, F.R.S.

PATHOLOGICAL SOCIETY, at 8.30.

WEDNESDAY, MAY 22.

SOCIETY OF ARTS, at 8.—The Dressing and Metallurgical Treatment of Nickel Ores: A. G. Charleton.

GEOLOGICAL SOCIETY, at 8.—On a Human Skull and Limb-Bones found in the Palaeolithic Terrace-Gravel at Gallely Hill (Kent): E. T. Newton, F.R.S.—Geological Notes of a Journey round the Coast of Norway and into Northern Russia: G. S. Boulger.—On Rhaetic Foraminifera from Wedmore (West Somerset): Frederick Chapman.

THURSDAY, MAY 23.

ROYAL INSTITUTION, at 3.—The Instruments and Methods of Spectroscopic Astronomy: Dr. W. Huggins, F.R.S.

SOCIETY OF ARTS, at 4.30.—The Northern Balochis: their Customs and Folk-lore: Oswald V. Yates.

INSTITUTION OF ELECTRICAL ENGINEERS (Society of Arts), at 8.—On the Recent Development of the Single-Acting High-Speed Engine, for Central Station Work: Mark H. Robinson.

FRIDAY, MAY 24.

ROYAL INSTITUTION, at 9.—The Absolute Measurement of Electrical Resistance: J. Viriamu Jones, F.R.S.

LINNEAN SOCIETY, at 3.—Annual Meeting.

PHYSICAL SOCIETY, at 5.—On Mixtures of Ethane and Nitrous Oxide: Dr. Kuenen.—The Measurement of Cyclically Varying Temperature: H. F. W. Burstall.

SATURDAY, MAY 25.

GEOLOGISTS' ASSOCIATION (Paddington Station), at 10.2 a.m.—Excursion to Goring. Directors: J. H. Blake and W. Whitaker, F.R.S.

LONDON GEOLOGICAL FIELD CLASS (Waterloo Station), at 3.5.—Excursion to the Bagshot Sand Hills at Frimley.

ROYAL BOTANIC SOCIETY, at 3.45.

BOOKS, PAMPHLETS, and SERIALS RECEIVED.

BOOKS.—*Esthetic Principles*: H. R. Marshall (Macmillan).—*Crystallography*: Prof. N. Story-Maskelyne (Oxford, Clarendon Press).—*A Primer of Mayan Hieroglyphics*: Dr. D. G. Brinton (Boston, Ginn).—*The Migration of British Birds*: C. Dixon (Chapman).—*Electricity in our Homes and Workshops*: S. F. Walker, 3rd edition (Whittaker).—*The Practical Telephone Handbook*, J. Poole, 2nd edition (Whittaker).—*The Land Birds in and around St. Andrews*: G. Bruce (Dundee, Leng).—*Wild Nature won by Kindness*: Mrs. Brightwen, 6th edition (Unwin).—*The Elements of Botany*: F. Darwin (Cambridge University Press).—*John Dalton and the Rise of Modern Chemistry*: Sir H. E. Roscoe (Cassell).—*Royal Natural History, Vol. 3* (Warne).—*Geschichte der Explosivstoffe. I. Geschichte der Sprengstoffchemie der Sprengtechnik und des Torpedowesens*: S. J. von Romocki (Berlin, Oppenheim).—*The Scientific Transactions of the Royal Dublin Society, Vol. 5 (series 2): The Brain of the Microcephalic Idiot*: Prof. D. J. Cunningham (Williams).—*Royal University of Ireland. Examination Papers, 1894* (Dublin, Ponsonby).—*A Manual for the Study of Insects*: J. H. and A. B. Comstock (Ithaca, Comstock).—*Sitzungsberichte der K. B. Gesellschaft der Wissenschaften, Mathematisch-Naturwissenschaftliche Classe 1894* (Prag).

PAMPHLETS.—*Summary Report of the Geological Survey Department for the Year 1894* (Ottawa, Dawson).—*Elasticity a Mode of Motion*: R. Stevenson (San Francisco).—*Kindergarten Mathematics (series A)—Algebra, Part 1*: M. H. Senior (Oldham, Bardsley).—*Petroleum, its Development and Uses*: R. N. Boyd (Whittaker).—*Notes on the Geology of the Island of Cuba*: R. T. Hill (Cambridge, Mass.).—*Jahresbericht der K. B. Gesellschaft der Wissenschaften, 1894* (Prag).

SERIALS.—*Proceedings of the Physical Society of London*, May (Taylor).—*Bulletin of the American Mathematical Society*, April (New York, Macmillan).—*Strand Magazine*, May (Newnes).—*Picture Magazine*, May (Newnes).—*American Journal of Science*, May (New Haven).—*Gazzetta Chimica Italiana*, 1895, Vol. 1, Fasc. 4 (Roma).—*Engineering Magazine*, May (Lucker).—*Journal of the Chemical Society*, May (Gurney).—*Morphologisches Jahrbuch*, 22 Band, 3 Heft (Leipzig, Engelmann).—*Himmel und Erde*, May (Berlin, Paetel).—*Science Progress*, May (Scientific Press, Ltd.).—*Astrophysical Journal*, May (Chicago).—*Psychological Review*, May (Macmillan).—*The Flowering Plants and Ferns of New South Wales*: J. H. Maiden, Part 1 (Sydney).—*Bulletin du Comité Internationale Permanent pour l'Exécution Photographique de la Carte du Ciel, Tome II, Troisième Fasc.* (Paris, Gauthier-Villars).—*Reports on the Victorian Coal-Fields*: J. Stirling, No. 3 (Melbourne, Brain).

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