

FRIDAY, JANUARY 13.

ROYAL ASTRONOMICAL SOCIETY, at 8.—A Suggestion for the Explanation of Stationary Radiant Points of Meteors: Prof. H. H. Turner.—Remarks on Prof. Turner's Paper, with another Suggested Explanation of Stationary Radiant Points of Meteors: Prof. A. S. Herschel.—Observations of the Leonids, November 1898: Observatory, Perth, West Australia.—On the Value of Possible Observations from Free Balloons: Rev. J. M. Bacon.—Note on Dr. Gill's paper "On a New Instrument for Measuring Astrophotographic Plates: Prof. H. H. Turner.—Note on Mr. Espin's Object in *Perseus*: C. D. Perrine.—Eclipse of the Moon, December 27, 1898: Rev. W. Sidgreaves.—The Great Sun-spot of September 1898: W. H. Robinson.

INSTITUTION OF CIVIL ENGINEERS, at 8.—The Application of the Science of Mechanics to Engineering Practice: Dr. Archibald Barr.

MALACOLOGICAL SOCIETY, at 8.—Notes on the Anatomy of some Snails (*Trachycystis*, *Dorcasia* and *Isomeria*): W. Moss and W. Mark Webb.—Illustrations of, with Notes on, some Non-Marine Hawaiian Molluscs: E. R. Sykes.—Description of New Non-Marine Molluscs from the Hawaiian Islands: C. F. Ancey.—Note on *Voluta Roadknightsae*: Agnes Kenyon.

MONDAY, JANUARY 16.

SOCIETY OF ARTS, at 8.—Bacterial Purification of Sewage: Dr. Samuel Rideal.

IMPERIAL INSTITUTE, at 8.30.—Personal Experiences in China: Rev. Gilbert Reid.

VICTORIA INSTITUTE, at 4.30.—Glacial Action in the Southern Hemisphere.

TUESDAY, JANUARY 17.

ROYAL INSTITUTION, at 3.—Morphology of the Mollusca: Prof. E. Ray Lankester, F.R.S.

ZOOLOGICAL SOCIETY, at 8.30.—General Account of his Zoological Expedition to the South Seas: Dr. Arthur Willey.—On the Characteristic Points in the Cranial Osteology of the Parrots: Prof. D'Arcy W. Thompson, C.B.—Report on the Gorgonacean Corals collected by Mr. J. Stanley Gardiner at Funafuti: Miss Isa L. Hiles.

INSTITUTION OF CIVIL ENGINEERS, at 8.—The Effects of Wear upon Steel Rails: William G. Kirkaldy.—On the Microphotography of Steel Rails: Sir William C. Roberts-Austen, K.C.B., F.R.S.

ROYAL PHOTOGRAPHIC SOCIETY, at 8.—On some New Half-tone Screens of English Manufacture: J. E. Johnson.

ROYAL STATISTICAL SOCIETY, at 5.

WEDNESDAY, JANUARY 18.

SOCIETY OF ARTS, at 8.—Canals and Inland Navigation in the United Kingdom: L. F. Vernon Harcourt.

GEOLOGICAL SOCIETY, at 8.—Felsitic Lavas and Tuffs near Conway (North Wales): Frank Rutley.—The Geology of Southern Morocco and the Atlas Mountains: the late J. Thomson.

ROYAL METEOROLOGICAL SOCIETY, at 7.45.—Annual General Meeting.—Address by the President (Mr. F. C. Bayard), on the Government Meteorological Organisations in various parts of the World.

ROYAL MICROSCOPICAL SOCIETY, at 8.—Annual Presidential Address.

ENTOMOLOGICAL SOCIETY, at 8.—Annual Meeting.—Address by the President, Mr. Roland Trimen, F.R.S.

THURSDAY, JANUARY 19.

ROYAL SOCIETY, at 4.30.—*Probable Papers*: Observations upon the Normal and Pathological Histology and Bacteriology of the Oyster: Prof. Herdman, F.R.S., and Prof. R. Boyce.—On the Formation of Multiple Images in the Normal Eye: S. Bidwell, F.R.S.—On the Vibrations in the Field round a Theoretical Hertzian Oscillator: Prof. K. Pearson, F.R.S., and Miss Lee.—On the Refractive Indices and Densities of Normal and Semi-normal Aqueous Solutions of Hydrogen Chloride, and the Chlorides of the Alkalies: Sir J. Conroy, F.R.S.

ROYAL INSTITUTION, at 3.—Tibet and the Tibetans: A. H. Savage Landor.

SOCIETY OF ARTS (Indian Section), at 4.30.—Railways in Burma, and their proposed Extension across Yunnan: J. Nisbet.

LINNEAN SOCIETY, at 8.—New Peridiniaceæ from the Atlantic: G. R. Murray, F.R.S., and Miss F. G. Whitting.—On the Structure of *Lepidostrobilus*: Arthur J. Maslen.—Some Observations on the Caudal Diplospondyly of Sharks: Dr. W. G. Ridewood.

CHEMICAL SOCIETY, at 8.—Researches on Moorland Waters I. Acidity: W. Ackroyd.— α -ketotetrahydronaphthalene: Prof. F. S. Kipping, F.R.S., and Alfred Hill.—A New Method for preparing *as*-dimethyl- and Trimethyl-succinic Acids: William A. Bone.—Reduction of Optically-active Mono- and Di-alkyloxysuccinic Acids from Malic and Tartaric Acids: Prof. Thomas Purdie, F.R.S., and William Pitheathly.—Action of Ammonia on Ethereal Salts of Organic Bases: Dr. Siegfried Ruhemann.—Esterification Constants of Substituted Acetic Acids: Dr. J. J. Sudborough and Lorenzo L. Lloyd.—Di-ortho-substituted Benzoic Acids. Part IV. Formation of Salts from Di-ortho-substituted Benzoic Acids and different Organic Bases: Lorenzo L. Lloyd and Dr. J. J. Sudborough.—The Thermal Effects of Dilution: J. Holmes Pollok.—The Changes of Volume due to Dilution of Aqueous Solutions: F. B. H. Wade.

FRIDAY, JANUARY 20.

ROYAL INSTITUTION, at 9.—Liquid Hydrogen: Prof. J. Dewar, F.R.S.

EPIDEMIOLOGICAL SOCIETY, at 8.30.—Epidemic Cerebro-spinal Meningitis: Dr. Bruce Low.

QUEKETT MICROSCOPICAL CLUB, at 8.

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BOOKS, PAMPHLETS, and SERIALS RECEIVED.

BOOKS.—Results of Rain, River and Evaporation Observations made in New South Wales during 1897: H. C. Russell (Sydney).—Iowa Geological Survey Annual Report, 1897, &c. (Des Moines).—The Last Link: E. Haeckel (Black).—Annual Report of the Smithsonian Institution, to July 1896 (Washington).—Geographical Journal, Vol. xii. (Stanford).—Notes from a Diary in Asiatic Turkey: Lord Warkworth (Arnold).—The History of Mankind: Prof. F. Ratzel, translated, 3 Vols. (Macmillan).—The Swastika: T. Wilson (Wesley).—Mathematical and Physical Tables: J. P. Wrapson and W. W. H. Gee (Macmillan).—Bush Fruits: Prof. F. W. Card (Macmillan).—Elementary Mathematics: J. L. S. Hatton and G. Bool (Whittaker).—Studien über Hirsche: Dr. H. Nitsche, Heft 1 (Leipzig, Engelmann).—Grundriss einer Geschichte der Naturwissenschaften: Dr. F. Dannemann, ii. Band (Leipzig, Engelmann).—Maryland Geological Survey, Vol. 2 (Baltimore).—The Geology of the Isle of Purbeck and Weymouth: A. Strahan (London).

PAMPHLETS.—A Course of Lectures on Mining. I. The South Wales Coal-field: Prof. W. Galloway (Cardiff).—The Gypsum Boulder of Great Crosby: T. M. Reade (Liverpool).

SERIALS.—Journal of Botany, January (West).—Middlesex Hospital Journal, December (London).—Journal of the Royal Agricultural Society, December (Murray).—Journal of the Royal Statistical Society, December (Stanford).—Reliquary and Illustrated Archaeologist, January (Bemrose).—Zeitschrift für Physikalische Chemie, xxvii. Band, 4 Heft (Leipzig).—Transactions of the Wagner Free Institute of Science of Philadelphia, April (Philadelphia).—Observatory, January (Taylor).—Scribner's Magazine, January (Low).—Geographical Journal, January (Stanford).—Knowledge, January (Witherby).—Journal of Anatomy and Physiology, January (Griffin).—Engineering Magazine, January (222 Strand).—Photogram, January (Dawbarn).—Monthly Weather Review, September (Washington).—Annuario Storico Meteorologico Italiano, Vol. 1, 1898 (Torino).—Mind, January (Williams).—Zeitschrift für Wissenschaftliche Zoologie, lxx. Band, 2 Heft (Leipzig).—Botanische Jahrbücher, Fünfundzwanzigster Band, 5 Heft (Leipzig).—Atlantic Monthly, January (Gay).—Imperial University, College of Agriculture, Bulletin, Vol. iii. No. 5 (Komaba).

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