

DIARY OF SOCIETIES.

THURSDAY, APRIL 1.

- ROYAL SOCIETY, at 4.30.—The Croonian Lecture—"The Mammalian Spinal Cord as an Organ of Reflex Action"—will be delivered by Prof. C. S. Sherrington, F.R.S.
 ROYAL INSTITUTION, at 3.—The Relation of Geology to History: Prof. W. Boyd Dawkins, F.R.S.
 SOCIETY OF ARTS, at 4.30.—A Visit to Russian Central Asia: Michael Francis O'Dwyer.
 LINNEAN SOCIETY, at 8.—On the Evolution of Oxygen from Coloured Bacteria: Dr. A. J. Ewart.—On the Germination of Spores of Agaricineæ: Miss Helen Beatrix Potter.
 CHEMICAL SOCIETY, at 8.—On the Oxidation of α -Dimethyl- α -Chloropyridine: E. Aston and Prof. J. Norman Collie, F.R.S.—The Composition of Cooked Fish: K. J. Williams.
 CAMERA CLUB, at 8.15.—Mountain and West Coast Scenery at Home and Abroad: T. C. Porter.

FRIDAY, APRIL 2.

- ROYAL INSTITUTION, at 9.—Metallic Alloys and the Theory of Solution: Charles T. Heycock, F.R.S.
 GEOLOGISTS' ASSOCIATION, at 8.—The Physical History of Romney Marsh: George Dowker.—A Collection of Flint Implements from Cookham: Llewellyn Treacher.
 SATURDAY, APRIL 3.
 ROYAL INSTITUTION, at 3.—Electricity and Electrical Vibrations: Lord Rayleigh, F.R.S.
 GEOLOGISTS' ASSOCIATION (Baker Street Station), at 1.37.—Excursion to Chesham and Cowcroft. Director: Upfield Green.

MONDAY, APRIL 5.

- SOCIETY OF ARTS, at 4.30.—Alloys: Prof. W. C. Roberts-Austen, C.B., F.R.S.
 SANITARY INSTITUTE, at 8.—Sanitary Building Construction: Prof. T. Roger Smith.
 SOCIETY OF CHEMICAL INDUSTRY, at 8.—Election of Officers and Five Members of Committee for the Session 1897-98.—The Chemical Stability of Nitro-compound Explosives: Oscar Guttmann.
 VICTORIA INSTITUTE, at 4.30.—Australian Aboriginal Art: The Bishop of Ballarat.

TUESDAY, APRIL 6.

- ROYAL INSTITUTION, at 3.—Animal Electricity: Prof. A. D. Waller, F.R.S.
 SOCIETY OF ARTS, at 8.—Recent Travels in Rhodesia and British Bechuana-land: C. E. Frapp.
 ZOOLOGICAL SOCIETY, at 8.30.—On the Myology of the Terrestrial Carnivora: Drs. B. C. A. Windle and F. G. Parsons.—Note upon the Minute Structure of the Teeth of *Notoryctes*: C. S. Tomes, F.R.S.—On the Blue Bear of Tibet, with Notes on the Members of the *Ursus arctus* Group: R. Lydekker, F.R.S.—An Account of the Freshwater Fishes collected in Celebes by Drs. P. and F. Sarasin: G. A. Boulenger, F.R.S.
 INSTITUTION OF CIVIL ENGINEERS, at 8.—Paper to be further discussed: Electric Lifts and Cranes: Henry W. Ravenshaw.—Paper to be read, time permitting: The Blackwall Tunnel: David Hay and Maurice Fitzmaurice.—Ballot for Members.

- MINERALOGICAL SOCIETY, at 8.—On a New Occurrence of Apophyllite in South Africa: J. Henderson.—On a Mineral from Hungary: Messrs. Prior and Spencer.—On the Indexing of Mineralogical Literature: Prof. Miers.—Some Simple Names for the Thirty-two Types of Crystal Symmetry: Prof. Miers.
 ROYAL VICTORIA HALL, at 8.30.—Movements of Plants: Rev. George Henslow.

WEDNESDAY, APRIL 7.

- SOCIETY OF ARTS, at 8.—Dairy Produce and Milk Supply: M. J. Dunstan.
 GEOLOGICAL SOCIETY, at 8.—On the Morle Slates and Associated Beds in North Devon and West Somerset, Part II.: Dr. Henry Hicks, F.R.S.—The Glacio-Marine Drift of the Vale of Clwyd: T. Mellard Reade.
 ENTOMOLOGICAL SOCIETY, at 8.—Report of the Committee on the Protection of British Insects in danger of Extirpation.
 SANITARY INSTITUTE, at 8.—Notification of Measles: Dr. Henry R. Kenwood.
 SOCIETY OF PUBLIC ANALYSTS, at 8.—The Separation and Identification of the Typhoid and Colon Bacilli: F. Wallis Stoddart.—Notes on Alcohol: J. F. Liverseege.
 INSTITUTION OF NAVAL ARCHITECTS, at 12.—Annual Report of Council, Election of President, Officers, and Council.—Address by the Chairman, the Right Hon. the Earl of Hopetoun, G.C.M.G.—The following Papers will then be read and discussed:—Recent Trials of the Cruisers *Powerful* and *Terrible*: A. J. Durston, C.B., R.N.—Water Tube Boilers in Warships: Rear-Admiral C. C. P. Fitzgerald, R.N.—A Mechanical Method of ascertaining the Stability of Ships: A. G. Ramage.

THURSDAY, APRIL 8.

- ROYAL SOCIETY, at 4.30.—Probable Papers: The Production of X-rays of different Penetrative Values: A. A. C. Swinton.—On the Application of Harmonic Analysis to the Dynamical Theory of the Tides, Part I.: S. S. Hough.—Photographic Spectra of Stars to the $3\frac{1}{2}$ Magnitude: F. McClean, F.R.S.—(1) Double (Antidrone) Conduction in the Central Nervous System; (2) Further Note on the Sensory Nerves of Muscles: Prof. Sherrington, F.R.S.—On the Breaking-up of Fat in the Alimentary Canal under Normal Circumstances and in the Absence of the Pancreas: Prof. V. Harley.—Condensation of Water Vapour in the Presence of Dust-free Air and other Gases: C. T. R. Wilson.—On Boomerangs: G. T. Walker.
 ROYAL INSTITUTION, at 3.—Roman Britain: Prof. W. Boyd Dawkins, F.R.S.
 MATHEMATICAL SOCIETY, at 8.—On the Potentials of Rings: A. L. Dixon.—An Extension of a certain Theorem: Rev. F. H. Jackson.
 INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—Recent Developments in Electric Traction Appliances: H. A. Baylor.
 INSTITUTION OF NAVAL ARCHITECTS, at 12.—On the Fighting Value of certain of the Older Ironclads if re-armed: Captain the Right Hon. Lord Charles Beresford, C.B., R.N.—The Application of the Compound Steam Turbine to the Purpose of Marine Propulsion: Hon. Charles Parsons.—On the Use of the Mean Water-Line in designing the Lines of Ships: A. G.

Ramage.—At 7.—The Accelerity Diagram of the Steam-Engine: J. Macfarlane Gray.—Note on the Geometry of Stability: J. Macfarlane Gray.—Acetylene, and its Probable Future Afloat: Prof. Vivian B. Lewes.
 CAMERA CLUB, at 8.15.—The Phonograph: Mr. Stroh and F. C. B. Cole.

FRIDAY, APRIL 9.

- ROYAL INSTITUTION, at 9.—The Limits of Audition: Lord Rayleigh, F.R.S.
 PHYSICAL SOCIETY, at 5.—A Nickel Stress Telephone: T. A. Garrett and W. Lucas.—On Alternating Currents in Concentric Conductors: W. A. Price.—On the Effect of Capacity on Stationary Electrical Waves in Wires: W. B. Morton.
 ROYAL ASTRONOMICAL SOCIETY, at 8.
 INSTITUTION OF CIVIL ENGINEERS, at 8.—Poole Harbour: Harold Bertridge.

BOOKS, PAMPHLETS, and SERIALS RECEIVED.

- BOOKS.—First Stage Inorganic Chemistry: Dr. G. H. Bailey (Clive).—Statesman's Year Book, 1897 (Macmillan).—Algebra for Beginners: Dr. I. Todhunter, revised and enlarged by Prof. S. L. Loney (Macmillan).—Hydraulic Machinery: R. G. Blaine (Spon).—Bourne's Insurance Directory, 1897: W. Schooling (E. Wilson).—Report of Observations of Injurious Insects: E. A. Ormerod, 20th Report (Simpkin).—Who's Who, 1897 (Black).—Les Femmes dans la Science: A. Rebière, deux édition (Paris, Nony).—Among British Birds in their Nesting Haunts: O. A. J. Lee, Part 3 (Edinburgh, Douglas).—First Principles of Natural Philosophy: Prof. A. E. Dolbear (Boston, Mass., Ginn).—Natural History in Shakespeare's Time: H. W. Seager (Stock).—Recherches sur la Sève Ascendante: H. S. Chamberlain (Neuchâtel, Attinger).—Ueber den Bau der Korallenriffe: Dr. A. Krämer (Kiel, Lipsius).—Congrès International des Pêches Maritimes, September 1896, Comptes rendus des Séances (Paris).—A Guide to the Clinical Examination of the Blood for Diagnostic Purposes: Dr. R. C. Cabot (Longmans).
 PAMPHLETS.—On the Colour and Colour-Patterns of Moths and Butterflies: A. G. Mayer (Boston, Mass.).—Some Factors in the Evolution of Adaptations: J. D. Hayland (Porter).—Birds of the Galapagos Archipelago: R. Ridgway (Washington).
 SERIALS.—Longman's Magazine, April (Longmans).—Good Words, April (Isbister).—Sunday Magazine, April (Isbister).—Chambers's Journal, April (Chambers).—Reliquary, &c., April (Bemrose).—Journal of the Chemical Society, February (Gurney).—Economic Journal, March (Macmillan).—Century Magazine, April (Macmillan).—Zeitschrift für Criminal-Anthropologie, Band 1, Heft 1 (Berlin, Pöbner).—Himmel und Erde, März (Berlin, Paetel).

CONTENTS.

	PAGE
A Dictionary of Birds. By O. S.	505
The Principles of Sociology. By H. W. B.	506
Our Book Shelf:—	
Cornish: "Short Studies in Physical Science"	507
Dewe: "New Thoughts on Current Subjects"	507
Van 't Hoff: "Vorlesungen über Bildung und Spaltung von Doppelsalzen"	507
Crapper: "Practical Electrical Measurements"	507
Bland: "Notes of Lessons on Elementary Botany"	507
Dolman: "Dr. Nansen: the Man and his Work"	507
Letters to the Editor:—	
Early Arrival of the Swift.—Prof. Alfred Newton, F.R.S.	508
Red Dust of Doubtful Origin.—J. M. Yates	508
Experiment on Interference. (<i>With Diagram</i>).—John Wylie	508
The Additional Colouring Matter of <i>Fucus vesiculosus</i> .—Clarence Waterer	508
Chinese Yeast.—Prof. Italo Giglioli	508
The Electric Eel.—J. J. Quelch	508
The Utility of Specific Characters.—Rev. John T. Gulick	508
Coccospheres and Rhabdospheres. (<i>Illustrated</i>). By George Murray and V. H. Blackman	510
M. Antoine Thomson d'Abbadie	511
Mr. W. W. Rundell. By E. W. C.	512
Notes	512
Our Astronomical Column:—	
The Planet Mars	516
Double-Star Measures	516
Belgium Observatory Annual	516
The James Forrest Lecture—Bacteriology. By Dr. G. Sims Woodhead	517
The Pasteur Memorial Lecture of the Chemical Society. By Prof. Percy Frankland, F.R.S.	518
The Diamond Mines of Kimberley. By Dr. William Crookes, F.R.S.	519
University and Educational Intelligence	524
Scientific Serials	524
Societies and Academies	525
Diary of Societies	528
Books, Pamphlets, and Serials Received	528