

exhibited. Another form, described under the name *Conodectes favosus*, may belong to the Diadectidæ, but its relationships are at present uncertain.

GÖTTINGEN.

Royal Society of Sciences.—In the *Nachrichten*, No. 4, 1895 (mathematico-physical section) the following memoirs communicated to the Society are published.

October 19.—J. Orth: Report on the work done in the Göttingen Pathological Institute in the summer half-year 1895.

November 16.—W. Schur: Further communications on the results of pendulum-observations in or near Göttingen.

November 30.—Georg Landsberg: Foundations of the arithmetical theory of the algebraic functions of one variable.—Eduard Riecke: The quantities of electricity concerned in a lightning-flash (43 to 98 coulombs).

DIARY OF SOCIETIES.

LONDON.

THURSDAY, MARCH 12.

ROYAL SOCIETY, at 4.30.—The Croonian Lecture: Observations upon Isolated Nerve: Electrical Changes a Measure of Physico-chemical Change: Dr. A. D. Waller, F.R.S.

MATHEMATICAL SOCIETY, at 8.—On the Enumeration of Groups of Totitives: Prof. Lloyd Tanner.—(1) The Catenary on the Paraboloid and Cone; (2) The Motion of the Top: Prof. Greenhill, F.R.S.

INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—High-Voltage Lamps and their Influence on Central Station Practice: G. L. Addenbrooke.

SOCIETY OF ANTIQUARIES, at 8.30.

CAMERA CLUB, at 8.15.—Lord Armstrong's Experiments in Electric Discharge: Dr. Bowles.

FRIDAY, MARCH 13.

ROYAL ASTRONOMICAL SOCIETY, at 8.—Observations of the Variable Star R Carinæ, December 1890 to August 1895: J. Tebbutt.—Discovery and Observations of Comet Brooks (*d* 1895): W. R. Brooks.—Observations of the Variable Stars W. X, and Y Sagittarii: Lieut.-Colonel Markwick.

—Elliptical Orbit Elements of Comet 1894 *b* (Gale): Rev. T. Roseby.—Results of Double Star Measures at Windsor, New South Wales, in 1895: J. Tebbutt.—On the Determination of the Errors of the Cape Réseau: David Gill and Harold Jacoby.—Royal Observatory, Edinburgh: Observations of comets.—Note on Mr. Stone's Paper, "Expressions for the Elliptic Co-ordinates of a Moving Point to the Seventh Order of Small Quantities": Prof. E. W. Brown.—Fireball of 1895, November 22: W. F. Denning.—On the Systematic Errors of Measures of Photographic Plates: Prof. H. H. Turner.—Note on the Zodiacal Light as seen at Oxford, 1896, March 4: Prof. H. H. Turner.—Variation of T Centauri: A. W. Roberts.—Royal Observatory, Greenwich: Results of Micrometer Measures of Double Stars made with the 28-inch Refractor in the Years 1894 and 1895.

PHYSICAL SOCIETY, at 5.—An Addition to the Wheatstone Bridge for the Determination of Low Resistances: J. H. Reeves.—A Communication on Kathode Rays: Herr Puluj.

MALACOLOGICAL SOCIETY, at 8.

INSTITUTION OF CIVIL ENGINEERS, at 8.—Tests of Centrifugal Pumps: J. C. Cornock.

SATURDAY, MARCH 14.

ROYAL INSTITUTION, at 3.—Light: Lord Rayleigh, F.R.S.

ROYAL BOTANIC SOCIETY, at 3.45.

ESSEX FIELD CLUB (at Loughton).—Demonstration Meeting.—Mosses and Scale Mosses (Musciacæ): G. M. Holmes and E. D. Marquand.

MONDAY, MARCH 16.

ROYAL GEOGRAPHICAL SOCIETY, at 4.30.—On the Maps used by Herodotus: John L. Myers.

VICTORIA INSTITUTE, at 4.30.—Relations of Mind and Body.

CAMERA CLUB, at 8.15.—The Faroe Islands: K. Grossman.

TUESDAY, MARCH 17.

ROYAL INSTITUTION, at 3.—The External Covering of Plants and Animals: Prof. C. Stewart.

ZOOLOGICAL SOCIETY, at 8.30.—A Contribution to our Knowledge of the Hymenopterous Fauna of Ceylon: Lieut.-Colonel C. T. Bingham.—On British Hydroids and Medusæ: Edward T. Browne.—On some Extinct Fishes of the Teleostean Family Gonorynchidæ: A. Smith Woodward.

INSTITUTION OF CIVIL ENGINEERS, at 8.—The Lixivation of Silver Ores: J. H. Clemen.—Mining and Treatment of Copper Ore at Tharsis, Spain: C. F. Courtney.—Tin Smelting at Pulo Brani, Singapore: John McKillop and T. Flower Ellis.

ROYAL STATISTICAL SOCIETY, at 5.—Reformatory and Industrial Schools: John Watson.

ROYAL PHOTOGRAPHIC SOCIETY, at 8.—Screens for Process Work; and a Note on Photogravure: Captain Collard.

ROYAL VICTORIA HALL, at 8.30.—Gold Mining: Dr. T. K. Rose.

WEDNESDAY, MARCH 18.

SOCIETY OF ARTS, at 8.—Bahamas Sisal Industry: Dr. D. Morris, C.M.G.

ROYAL METEOROLOGICAL SOCIETY, at 7.30.—Weather Forecasts and Storm Warnings: F. Gaster.

ROYAL MICROSCOPICAL SOCIETY, at 8.—American Rotifera: Dr. A. C. Stokes.

ENTOMOLOGICAL SOCIETY, at 8.—Classification of Three Sub-families of Moths of the Family Pyralidæ: the Epipaschiinæ, Endotrichinæ, and Pyralinæ: George Francis Hampson.—Descriptions of New Oriental Scolytidæ: Walter F. H. Blandford.

NO. 1376, VOL. 53]

THURSDAY, MARCH 19.

ROYAL SOCIETY, at 4.30.

SOCIETY OF ARTS (Imperial Institute), at 8.30.—The Great Landslip at Gohna, in Gurhwal, and the Measures adopted to prevent Serious Loss of Life: J. H. Glass, C.I.E.

LINNEAN SOCIETY, at 8.—On the Structure of the Female Flowers and Fruit of Sararanga, Hemsl (Pandanaeæ): Dr. A. Stapf.—On Two Little-known Opisthoglyphous Snakes: G. S. West.

CHEMICAL SOCIETY, at 8.—The Constitution of a New Organic Acid: H. J. H. Fenton.—The Volume and Optical Relationships of the Monoclinic Series of Double Sulphates R₂M(SO₄)₂.H₂O: A. F. Tutton.

SOCIETY OF ANTIQUARIES, at 8.30.

CAMERA CLUB, at 8.15.—Views in Cashmere: G. Millais.

FRIDAY, MARCH 20.

ROYAL INSTITUTION, at 9.—Immunisation against Serpents' Venom and the Treatment of Snake-Bite with Antivenere: Prof. T. R. Fraser, F.R.S.

EPIDEMIOLOGICAL SOCIETY, at 8.—On Puerperal Mortality: a Statistical and Etiological Inquiry: Dr. Williams.—An Outbreak of Typhoid Fever in Beyrout, Syria: Dr. Wortabet.

QUEKETT MICROSCOPICAL CLUB, at 8.

SATURDAY, MARCH 21.

ROYAL INSTITUTION, at 3.—Light: Lord Rayleigh, F.R.S.

BOOKS, PAMPHLETS, and SERIALS RECEIVED.

BOOKS.—By Meadow and Stream: The Amateur Angler (S. Low).—Intensity Coils, 17th edition (Perken).—Alternating and Interrupted Electric Currents: Prof. G. Forbes (Biggs).—Physical Units: Dr. M. Maclean (Biggs).—Hypnotism, Mesmerism, and the New Witchcraft: E. Hart, new edition (Smith).—Les Fermentations: P. Schützenberger, sixième édition (Paris, Alcan).—The New Photography: A. B. Charwood (Downey).—The Story of the Nations: The West Indies and the Spanish Main: J. Rodway (Unwin).—Leçons sur la Cellule, Morphologie et Reproduction: L. F. Hennequy (Paris, Carré).—Mechanics for Beginners: W. Gallatly (Macmillan).—The Number Concept: Dr. L. L. Conant (Macmillan).—An Elementary Treatise on Rigid Dynamics: W. J. Loudon (Macmillan).—Electric Wiring: R. Robb (Macmillan).—Griffin's Electrical Engineer's Price-Book, new edition, Edited by H. J. Dowling (Griffin).

PAMPHLETS.—Zur Mechanik des Vogelfluges: Dr. Fr. Ahlborn (Hamburg).—Preliminary Report on the Tsetse Fly Disease, or Nagana, in Zululand: Surgeon-Major D. Bruce (Durban).—How to Assist the Sight (J. H. Steward).

SERIALS.—Bulletin of the American Mathematical Society, February (New York, Macmillan).—Geographical Journal, March (Stanford).—Journal of the Royal Microscopical Society, February (Williams).—Psychological Review, Monograph Supplement, No. 2, Association: M. W. Calkins (Macmillan).—Science Progress, March (Scientific Press).—Revue de l'Université de Bruxelles, Nos. 1 and 2 (Bruxelles).—Proceedings of the Physical Society, March (Taylor).—Engineering Magazine, March (Tucker).

CONTENTS.

PAGE

A Glacial Handbook. By Prof. Grenville A. J. Cole	433
Philosophy and Evolution. By A. R. W.	435
Our Book Shelf:—	
MacDougal: "Experimental Plant Physiology" . . .	436
Austin and Thwing: "Exercises in Physical Measurement"	436
Letters to the Editor:—	
The Age of the Wealden.—Prof. O. C. Marsh . . .	436
The Röntgen Rays.—Ralph R. Lawrence; Prof. Silvanus P. Thompson, F.R.S.; J. D. Cormack and Herbert Ingle; G. H. P.	436
The Aurora at Waterford.—Dr. M. F. O'Reilly . . .	437
An Unusual Meteor.—J. Edmund Clark	437
Recent Work of the Geological Survey of the United States. I.	437
Ostwald's Energetics. By Prof. Geo. Fras. Fitzgerald, F.R.S.	441
The Highlands of Peru. (<i>Illustrated.</i>)	442
Sekiya Seikei. By J. M.	443
Notes.	443
Our Astronomical Column:—	
Perrine's Comet (1895)	447
Comet Perrine-Lamp	448
Orbit of δ Cephei	448
The Absolute Velocity of 61 Cygni	448
On the Appearance of the Spectral Lines of Clevite Gas in Stellar Spectra	448
The Röntgen Rays	449
On the Generation of Longitudinal Waves in Ether. (<i>With Diagram.</i>) By Lord Kelvin, F.R.S.	450
University and Educational Intelligence	451
Scientific Serials	452
Societies and Academies	453
Diary of Societies	456
Books, Pamphlets, and Serials Received	456