

**Lanfry**: A new thiophene compound,  $C_{10}H_6S_2$ , and some of its derivatives. The new compound was isolated from the products of the reaction of sulphur and naphthalene vapour when passed through an iron tube at a red heat. Its composition is probably either phenothiophene or phenodithiophene. An account is given of the behaviour of the new compound on oxidation.—**A. Wahi**: The condensation of acetic ester with its higher homologues. Contrary to the views held up to the present, the condensation of acetic ester with its homologues by means of sodium is possible in certain cases. Details are given of the preparation of butyrlacetic ester by this reaction.—**Jean Dybowski**: A new source of natural indiarubber. A method of utilising Jeloutong, resulting from the coagulation of the latex of *Dyera costulata*.—**L. Blaringhem**: The rules of Naudin and the laws of Mendel relating to hybrids. The examples described are not in accord with Mendel's laws, but fully agree with the rules given by Naudin in 1861.—**Jules Laurent**: The physical conditions for the resistance of the vine to mildew.—**René Maire** and **Adrien Tison**: Researches on some Cladochytriaceae.—**P. Chausé** and **L. Pissot**: The process of caseification in human tuberculosis.—**Ch. Janet**: The existence of a chordotonal organ and of a pulsatile antennary vesicle in the bee, and on the morphology of the head of this species.—**Alfred Angot**: The value of the magnetic elements at the Val-Joyeux Observatory on January 1, 1911.—**Alfred Angot**: The earthquake of January 3-4, 1911. The earthquake, the epicentre of which appeared to be in Central Asia, was recorded on the seismograph of the Parc Saint-Maur Observatory, and was the most violent hitherto recorded, the amplitude being outside the range of the recorder for about six minutes. The vibrations of the ground were sufficient to disturb the magnetographs.—**Louis Fabry**: The earthquake of January 3, 1911. Details of the records of the seismograph at the Observatory of Marseilles.—**Henri Bourget**: Remarks on the preceding communication.

CALCUTTA.

**Asiatic Society of Bengal, December 7, 1910.**—**P. C. Rây** and **Jitendra Nath Rakshit**: Methylamine nitrite. When mercuric nitrite solution is treated with dilute ammonia, a precipitate of dimercurammonium nitrite is formed, and ammonium nitrite remains in solution (Trans., 1902, lxxxi., 644). Recently a solution of mercuric nitrite was similarly treated with dilute methylamine. The precipitate which was thus obtained proved on analysis to be dimercurammonium nitrite, pure and simple. The filtrate, amounting to about 25 c.c., was distilled in a vacuum at temperatures gradually raised from 45° to 50°.—**Hem Chandra Das-Gupta**: The occurrence of Maestrichtien fossils at Kacch Station (in British Baluchistan).

DIARY OF SOCIETIES.

THURSDAY, JANUARY 19.

ROYAL SOCIETY, at 4.30.—The Action of *B. luctis arogenes* on Glucose and Mannitol. Part II.: G. S. Walpole.—The Pharmacological Action of South African Boxwood (*Gonioma Kamassi*): Dr. W. E. Dixon.—Autoagglutination of Red Blood Cells in Trypanosomiasis: Dr. W. Yorke.—The Transformation of Proteids into Fats during the Ripening of Cheese (Preliminary Communicator): M. Nierenstein.—The Action of X-rays on the Developing Chick: J. F. Gaskell.—(1) Experiments to ascertain if Antelope may act as a Reservoir of the Virus of Sleeping Sickness (*Trypanosoma gambiense*); (2) Experiments to ascertain if the Domestic Fowl of Uganda may act as a Reservoir of the Virus of Sleeping Sickness (*Trypanosoma gambiense*): Colonel Sir D. Bruce, F.R.S., and others.

ROYAL INSTITUTION, at 3.—Recent Progress in Astronomy: F. W. Dyson, F.R.S., Astronomer Royal.

LINNEAN SOCIETY, at 8.

ROYAL GEOGRAPHICAL SOCIETY, at 5.—Research Meeting. Neolithic Villages in Thessaly: Messrs. Wace and Thompson.

FRIDAY, JANUARY 20.

ROYAL INSTITUTION, at 9.—Chemical and Physical Change at Low Temperatures: Sir James Dewar, F.R.S.

INSTITUTION OF MECHANICAL ENGINEERS, at 8.—Modern Electrical Dock-equipment, with Special Reference to Electrically-operated Coal-hoists: W. Dixon and G. H. Baxter.

INSTITUTION OF CIVIL ENGINEERS, at 8.—The Design and Construction of Reinforced-concrete Arches: G. F. Walton.

TUESDAY, JANUARY 24.

ROYAL INSTITUTION, at 3.—Hereditry: Prof. F. W. Mott, F.R.S.

ROYAL ANTHROPOLOGICAL INSTITUTE, at 8.15.—Anniversary Meeting.

MINERALOGICAL SOCIETY, at 5.30.—On Kaolin: F. H. Butler.—On Schwartzbergite: Dr. G. F. H. Smith and Dr. G. T. Prior.—An

Improved Form of Total Refractometer: A. Hutchinson.—A Case of Electrostatic Separation: T. Crook.

INSTITUTION OF CIVIL ENGINEERS, at 8.—Sand-movements at Newcastle Entrance, N.S.W.: C. W. King.—Fremantle Harbour-work, Western Australia: C. S. R. Palmer.—The Bar Harbours of New South Wales: G. H. Halligan.

WEDNESDAY, JANUARY 25.

ROYAL SOCIETY OF ARTS, at 8.—Motor Transport in Great Britain and the Colonies: H. M. Wyatt.

INSTITUTION OF MINING AND METALLURGY, at 8.—*Adjourned discussion*: Notes on Chilian Mills in Russia: H. C. Bayldon.—Notes on Placer Mining, with Special Reference to Hydraulic Sluicing: N. A. Loggin.

GEOLOGICAL SOCIETY, at 8.—The Skomer Volcanic Series (Pembrokeshire): H. H. Thomas.—Some African Evidence for the Planetismal Hypothesis: E. H. L. Schwarz.

BRITISH ASTRONOMICAL ASSOCIATION, at 5.

THURSDAY, JANUARY 26.

ROYAL SOCIETY, at 4.30.—*Probable Papers*: Memoir on the Theory of the Partitions of Numbers. Part V. Partitions in Two-dimensionals Space: Major P. A. MacMahon, F.R.S.—The Origin of Magnetic Storms: Dr. A. Schuster, F.R.S.—On the Fourier Constants of a Function: Dr. W. H. Young, F.R.S.—On the Energy and Distribution of Scattered Röntgen Radiation: J. A. Crowther.—On some new Facts connected with the Motion of Oscillating Water: Mrs. H. Ayrton.

ROYAL INSTITUTION, at 3.—Recent Progress in Astronomy: F. W. Dyson, F.R.S., Astronomer Royal.

INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—Long Distance Transmission of Electrical Energy: W. T. Taylor.—Extra High Pressure Transmission Lines: R. Borlase Matthews and C. T. Wilkinson.

FRIDAY, JANUARY 27.

ROYAL INSTITUTION, at 9.—Radioactivity as a Kinetic Theory of a Fourth State of Matter: Prof. W. H. Bragg, F.R.S.

PHYSICAL SOCIETY, at 5 (at University College).—A Demonstration of Phase Difference between the Primary and Secondary Currents of a Transformer by means of a Simple Apparatus: Prof. F. T. Trouton, F.R.S.—A Note on the Experimental Measurement of the High Frequency Resistance of Wires: Prof. J. A. Fleming, F.R.S.—(1) The Measurement of Energy Losses in Condensers traversed by High Frequency Oscillations; (2) Some Resonance Curves taken with Impact and Spark Discharges: Prof. J. A. Fleming, F.R.S., and G. B. Dyke.—Council Meeting at 4.30 p.m.

SATURDAY, JANUARY 28.

ESSEX FIELD CLUB, at 6 (at Essex Museum of Natural History, Stratford).—Exhibition of Coloured Photographs of Alpine Flowering Plants: Somerville Hastings.—Note on the Occurrence of Stony Beds underlying Harwich Harbour: Percy Thompson.—On a Pre-historic Interment found near Walton-on-Naze: Hazzlegine Warren.

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