

**P. Gaubert**: The determination of minerals by the microscopical examination of the streak left on a hard body. The microscopical examination of the streak produced on a plate of ground glass or quartz can be used as a means of rapid identification of a mineral or of its constituents. It has the advantage of using only a minute weight of the material without damage to the specimen.—**Sabra Stefanescu**: The activity and correlation of the molars and maxillaries of mastodons and elephants.—**René Souèges**: The embryogeny of the Plantagaceae. The development of the embryo in *Plantago lanceolata*.—**J. Dauvergne and Mlle. L. Weil**: A method of propagating by cuttings in a sterile liquid medium.—**J. Beauverie**: The yellow rust of wheat (*Puccinia glumarum*) in 1923.—**Henri Coupin**: The swelling of seeds and the osmotic pressure of the medium. From experiments on the swelling of seeds in sugar solutions of varying concentration it is shown that the osmotic pressure of the cells of seeds is generally high, from 20 to 45 atmospheres.—**H. Colin and H. Belval**: The levulosanes in cereals.—**Ph. Joyet-Lavergne**: The cytoplasmic structure of *Adelina dimidiata*, a parasite of *Scolopendra cingulata*.—**Pierre Danglard**: The vital coloration of the vacuolar apparatus in the marine peridians.—**Jules Amar**: Transformism and heredity.—**L. Fage and R. Legendre**: The lunar rhythms of some nereidians.—**C. Levaditi, S. Wicolau and Mlle. R. Schoen**: Etiology of encephalitis.

### Official Publications Received.

Records of the Botanical Survey of India. Vol. 8, No. 4: Flora Arabica. By Prof. Ethelbert Blatter. Part 4: Labiateae-Ceratophyllaceae. Pp. 365-450. (Calcutta: Government Printing Office.) 1.6 rupees.

Report of the Botanical Survey of India for 1922-23. Pp. 10. (Calcutta: Government Printing Office.)

A Report of the Fifth Congress of the Far Eastern Association of Tropical Medicine held in Malaya, September 8-17, 1923. Edited by Dr. J. W. Scharff. Pp. 90. (Singapore: Government Printing Office.)

Statements laid before the Committee on Beri-Beri Control and the Resolution recommended by the Committee as amended by the Council and passed at the General Meeting of the Fifth Congress of the Far Eastern Association of Tropical Medicine. Pp. 12. (Singapore: Government Printing Office.)

Forest Bulletin No. 53: Summary of Results of Treated and Untreated Experimental Sleepers laid in the various Railway Systems of India, brought up to date. By R. S. Pearson. Pp. 28. (Delhi: Government Central Press.) 6 annas.

University of California Bulletin. Third Series, Vol. 16, No. 11: University of California Publications, Price List 1923. Pp. 89. (Berkeley, Cal.: University of California Press.)

Proceedings of the Cambridge Philosophical Society. Vol. 21, Part 6. Pp. 569-812 + viii. (Cambridge: At the University Press.) 10s. 6d. net.

Livingstone College. Annual Report and Statement of Accounts for the Year 1922-23. Pp. 24. (Leyton, E.10.)

The Manchester Steam Users' Association for the Prevention of Steam Boiler Explosions, and for the Attainment of Economy in the Application of Steam. Memorandum by Chief Engineer for the Year 1922. Pp. 23. (Manchester.)

### Diary of Societies.

MONDAY, DECEMBER 10.

VICTORIA INSTITUTE, at 4.30.—**W. Dale**: Egypt in the Days of Akhenaten and Tutankhamen.

ROYAL GEOGRAPHICAL SOCIETY (at Lowther Lodge, Kensington Gore), at 5.—**Dr. A. T. Doodson**: The Work of the Liverpool Tidal Institute.

BRITISH PSYCHOLOGICAL SOCIETY (Education Section) (Annual General Meeting) (at London Day Training College), at 5.30.—**Prof. Wynn-Jones**: Vocational Tests in Music.

SOCIETY OF ENGINEERS, INC., at 6.—Annual General Meeting.

ROYAL SOCIETY OF ARTS, at 8.—**Prof. A. F. Barker**: Recent Progress in the Wool Industries (Cantor Lectures) (2).

TUESDAY, DECEMBER 11.

INSTITUTION OF PETROLEUM TECHNOLOGISTS (at Royal Society of Arts), at 5.30.—**L. R. McCollum**: The Modern Rotary Drilling System.

INSTITUTE OF TRANSPORT (Metropolitan Graduate and Student Society) (at Institution of Electrical Engineers), at 6.—**C. Anderson**: Ministry of Transport Requirements, with reference to Railway Companies.

INSTITUTE OF MARINE ENGINEERS, INC., at 6.30.—Adjourned Discussion on Paper read by **E. W. Blocksidge** at the Shipping and Engineering Exhibition on Life Saving Appliances on Large Passenger Steamers.

ROYAL PHOTOGRAPHIC SOCIETY (Scientific and Technical Group), at 7.—**W. Clark**: The Sensitivity of the Silver Halide Grains of a Photographic Emulsion.—Communications from the Eastman Kodak Research Laboratory.—**L. A. Jones and E. Huse**: The Relation between Time and Intensity in Photographic Exposure.—**J. B. Capstaff and N. B. Green**: A Motion Picture Densitometer.

QUEKETT MICROSCOPICAL CLUB, at 7.30.—**J. E. Barnard**: Some Problems in Medical Microscopy.

ILLUMINATING ENGINEERING SOCIETY (at Royal Society of Arts), at 8.—**G. Herbert, R. A. Ives, and others**: Discussion on Some Applications of Illuminating Engineering in Practice.

ROYAL ANTHROPOLOGICAL INSTITUTE, at 8.15.—**G. Hewett**: The Dusun of British North Borneo.

WEDNESDAY, DECEMBER 12.

INSTITUTION OF CIVIL ENGINEERS (Informal Meeting), at 7.—**W. P. F. Faughaenel, W. N. Booth, and others**: Discussion on The Lighting of Factories.

ROYAL SOCIETY OF ARTS, at 8.—**Sir Frank Baines**: The Preservation of Historic Buildings and Ancient Monuments.

ROYAL SOCIETY OF MEDICINE (Psychiatry Section), at 8.30.—**Dr. W. L. Templeton and Dr. H. J. Macbride**: The Malaria Treatment of G.P.I.

THURSDAY, DECEMBER 13.

LONDON MATHEMATICAL SOCIETY (at Royal Astronomical Society), at 5.—**H. B. C. Darling**: The Trinomial Quintic.—**H. D. Kloosterman**: Representation of a Number in the Form  $ax^2 + by^2 + cz^2 + dt^2$ .—**Prof. Tadahiko Kubota**: Some Inequalities concerning Ovals and Ovaloids.—**W. L. Marr**: The Occurrence of a Linear Determinantal System of Points.—**Major P. A. MacMahon**: Properties of Prime Numbers deduced from the Calculus of Symmetric Functions.

CHILD-STUDY SOCIETY (at Royal Sanitary Institute), at 6.—**Miss Kate Stevens**: My Trip round the World.

INSTITUTION OF ELECTRICAL ENGINEERS at 6.—**D. Brownlie**: Pulverised Fuel and Efficient Steam Generation.

SOCIETY OF DYERS AND COLOURISTS (London Section) (at the Dyers' Hall, Dowgate Hill), at 7.—**A. E. Woodhead**: Colour Solvents and their Application to Textile Fibres.

OPTICAL SOCIETY (at Imperial College of Science and Technology), at 7.30.—**T. Smith**: The Primary and Secondary Constant Magnification Surfaces of Thin Lenses.—**W. Swaine**: A Suggested Standard Trial Case and Simplification in Ophthalmic Policy.—**B. K. Johnson**: Exhibition of an Optical Revolution Counter.—**D. Baxandall**: Exhibition of the Troughton Dividing Engine (from the Science Museum, Kensington).

C.B.C. SOCIETY FOR CONSTRUCTIVE BIRTH CONTROL AND RACIAL PROGRESS (at Essex Hall), at 8.—**Prof. E. W. Macbride**: The Inheritance of Mental Defects.

INSTITUTE OF METALS (London Local Section) and INSTITUTION OF BRITISH FOUNDRYMEN (at Institute of Marine Engineers, Inc.), at 8.—**A. H. Munday**: Some Foundry Problems.

ROYAL SOCIETY OF TROPICAL MEDICINE AND HYGIENE (Laboratory Meeting) (at London School of Tropical Medicine, Endsleigh Gardens), at 8.15.

FRIDAY, DECEMBER 14.

ROYAL ASTRONOMICAL SOCIETY, at 5.—**Dr. J. H. Jeans**: Internal Motions in Spiral Nebulae.—**J. W. Gifford**: Telescopic Triple Object Glass of High Relative Aperture.—**J. S. Plaskett**: The H and K Lines of Calcium in O-type Stars.—**J. H. Reynolds**: The Galactic Distribution of the Small Spiral and Spheroidal Nebulae.

INSTITUTION OF MECHANICAL ENGINEERS, at 6.—**Prof. A. H. Gibson and H. W. Baker**: Exhaust-Valve and Cylinder-Head Temperatures in High-speed Petrol Engines.

MALACOLOGICAL SOCIETY OF LONDON (at Linnean Society), at 6.

JUNIOR INSTITUTION OF ENGINEERS, at 7.30.—**S. Bylander**: L.C.C. Regulations for Steel Framed Buildings.

SATURDAY, DECEMBER 15.

BRITISH PSYCHOLOGICAL SOCIETY (Annual General Meeting) (at University College), at 3.15.—**Miss H. M. Wells**: A Note on the Psychological Significance of the Psycho-galvanic Reaction.—**J. Kay**: Visual Perceptual Tests.

### PUBLIC LECTURES.

SATURDAY, DECEMBER 8.

HORNIMAN MUSEUM (Forest Hill), at 3.30.—**Dr. E. M. Delf**: Sunlight and Life.

MONDAY, DECEMBER 10.

UNIVERSITY COLLEGE, at 5.30.—**Prof. J. N. Brönsted**: Some Chapters in the Recent Development of the Theory of Electrolytic Dissociation. (Succeeding Lectures on December 12 and 14.)

TUESDAY, DECEMBER 11.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, at 4.—**F. W. Twort**: The Influence of Environment on the Life of Bacteria. (Succeeding Lectures on December 13, 17, 18, and 19.)

ROYAL INSTITUTE OF PUBLIC HEALTH, at 5.—**Prof. D. Levaditi**: Harben Lectures. (Succeeding Lectures on December 12 and 13.)

KING'S COLLEGE, at 5.30.—**Miss Hilda D. Oakeley**: The Roots of Early Greek Philosophy: Ethical.

WEDNESDAY, DECEMBER 12.

ROYAL INSTITUTE OF PUBLIC HEALTH, at 4.—**H. D. Herring**: The Disposal of the Dead, with Special Reference to Cremation.

WESTFIELD COLLEGE (Hampstead), at 5.15.—**Prof. Craigie**: The Making of a Dictionary.

THURSDAY, DECEMBER 13.

KING'S COLLEGE, at 5.30.—**Prof. Seton Watson**: The Balkan States and Europe (League of Nations Union Lecture).

UNIVERSITY COLLEGE, at 5.30.—**Miss M. A. Murray**: Matrilineal Descent.

SATURDAY, DECEMBER 15.

HORNIMAN MUSEUM (Forest Hill), at 3.30.—**Miss M. A. Murray**: My Excavations in Malta.