

As the series descends through such species as *E. botryoides*, *E. saligna*, &c., we reach those Eucalypts of which the principal oil constituents are pinene and eucalyptol, the latter constituent increasing in amount until such excellent eucalyptol oils as those of *E. globulus*, *E. Smithii*, *E. longifolia*, &c., are reached. The venation of the leaves of these species is similar, is more open, the individual lateral veins having become more distinct, and with the bending of the marginal vein, commencing to form the looping so characteristic of the phellandrene-peppermint group, the species of which include those of *E. dives*, *E. radiata*, *E. amygdalina*, *E. Sieberiana*, &c. The principal constituent in these oils is phellandrene, and at the extreme end this constituent is present in such abundance as to exclude, almost entirely, the eucalyptol. The pinene which was such a prominent constituent in the oils of the earlier members of the series is only present in the oils of this group in minute quantities. The looping appearance of the venation of the members of the phellandrene-peppermint group has become more open, and the spaces between the principal lateral veins are larger. With the subordination of many of the original lateral veins the spaces provided for the formation of the oil glands is larger, and consequently we find these more numerous in the members of this group; the yield of oil obtainable is therefore much greater, and it is this feature which enables such enormous yields of oil to be obtained from such species as *E. amygdalina*, *E. dives* and *E. radiata*.

DIARY OF SOCIETIES.

THURSDAY, DECEMBER 12.
ROYAL SOCIETY, at 4.30.—On the Action of the Spurge (*Euphorbia hiberna*, L.) on Salmonoid Fishes: Dr. H. M. Kyle.—Contributions to the Chemistry of Chlorophyll. No. VIII. Changes undergone by Chlorophyll in passing through the Bodies of Animals: Dr. E. Schunck, F.R.S.—The Result of Chilling Copper-Tin Alloys. Second Communication. C. T. Heycock, F.R.S., and F. H. Neville, F.R.S.—The Effective Temperature of the Sun: W. E. Wilson, F.R.S.
MATHEMATICAL SOCIETY, at 5.30.—Flexure of a Circular Plate: J. H. Michell.—Non-uniform Convergence, and the Integration of Series: Dr. Hobson, F.R.S.
INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—The Physical Properties of certain Aluminium Alloys and some Notes on Aluminium Conductors: Prof. E. Wilson (conclusion of discussion).—Some Principles underlying the Profitable Sale of Electricity: Arthur Wright.
CHEMICAL SOCIETY, at 8.—Extraordinary General Meeting.
FRIDAY, DECEMBER 13.
PHYSICAL SOCIETY, at 5.—On Circular Filaments and Circular Magnetic Shells equivalent to Circular Coils, and on the Equivalent Radius of a Coil: Prof. Thomas R. Lyle.—Air Pressures used in playing Brass Instruments: Dr. Barton and S. C. Laws.—A New Hygrometric Method: E. B. H. Wade.
ROYAL ASTRONOMICAL SOCIETY, at 5.—The Observed Motion and Duration of the Radiant Point of the Leonids: W. F. Denning.—Observations of Nova Persei: J. E. Gore.—Apparent Paucity of the Leonid Stream: Rev. S. J. Johnson.—Contribution to the History of the Reflex Zenith Tube: S. C. Chandler.—*Probable Papers*: On the Accuracy of Measures on Photographs: Remarks on Recent Papers by M. Lowry and Mr. H. C. Plummer: A. R. Hinks.—Description of Adams's MSS. on the Perturbations of Uranus: R. A. Sampson.
MALACOLOGICAL SOCIETY, at 8.—On the Anatomy and Relationships of *Volva musica*, Linn.; with Notes upon other supposed Members of the *Volvitidae*: S. Pace.—Descriptions of a New East African *Ennea* and a N.W. Australian *Thersites* (*Rhagada*): H. Fulton.—*Eulota blakeana*, Newc., and *E. luna*, Pils.: G. K. Gude.—Note on the Pairing of *Pyramidula rotundata* with *Vitrea lucida*: Mons. Caziot.
EPIDEMIOLOGICAL SOCIETY, at 8.30.—Dysentery in Asylums: Dr. Mott, F.R.S.
SATURDAY, DECEMBER 14.
ESSEX FIELD CLUB (at Essex Museum of Natural History, Stratford), at 6.30.—Contributions to the Pleistocene Geology of the Thames Valley. I. The Grays Thurock Area, Part II.: A. C. Hinton and A. S. Kennard.—The Water-Mites (Hydrachnidæ) of Epping Forest: C. D. Soar.—Manganiferous Nodules in the Boulder-clay Soils of Essex: Miss Thresh.
MONDAY, DECEMBER 16.
SOCIETY OF ARTS, at 8.—The Chemistry of Confectioners' Materials and Processes: William Jago.
IMPERIAL INSTITUTE, at 8.30.—The Economic Resources of the Straits Settlements and the Malay Peninsula: H. N. Ridley.
TUESDAY, DECEMBER 17.
ZOOLOGICAL SOCIETY, at 8.30.—On the Structure of the Larval *Polypterus*: J. S. Budgett.—On the Spawn and Young of a Polychæte Worm of the Genus *Marphysa*: L. A. Borradaile.—On the Anatomy of Gruiform Birds, with Special Reference to the Correlation of Modifications: Dr. P. Chalmers Mitchell.
INSTITUTION OF CIVIL ENGINEERS, at 8.—Motive Power from Blast-furnace Gases: Bryan Donkin.
ROYAL STATISTICAL SOCIETY, at 5.—The Suspension of the Berlin Produce Exchange, and its Effect on Corn Prices: R. H. Hooker.
WEDNESDAY, DECEMBER 18.
SOCIETY OF ARTS, at 8.—Range Finders: Prof. George Forbes, F.R.S.
GEOLOGICAL SOCIETY, at 8.—Coal and Petroleum Deposits in European Turkey: Lieut. Colonel Thomas English.—(1) On the Geological and Physical Development of Dominica, with Notes on Martinique, St. Lucia, St. Vincent and the Grenadines; (2) On the Geological and Physical Development of Barbados, with Notes on Trinidad: Prof. J. W. Spencer.

ROYAL METEOROLOGICAL SOCIETY, at 7.30.—Further Observations and Conclusions in relation to Atmospheric Transparency: Hon. F. A. Rollo Russell.—Remarkable Phosphorescent Phenomenon observed in the Persian Gulf, April 4 and 9, 1901: W. S. Hoseason.—On the Mechanical Principle of Atmospheric Circulation: Captain R. A. Edwin, R.N.
ROYAL MICROSCOPICAL SOCIETY, at 8.—Development and Structure of Eyes, illustrated by Micro-slides: F. W. Watson Baker.
THURSDAY, DECEMBER 19.
LINNEAN SOCIETY, at 8.—On the Brain of Recent and Fossil Lemurs: Dr. G. Elliot Smith.—On the Ostracoda collected round the Funafuti: F. Chapman.—Exhibitions: A Gigantic Argulus from Japan and a Specimen dredged at the Cape: Prof. G. B. Howes, F.R.S.—A New Polyzoon from Tanganyika: J. E. S. Moore.—An Example of White's Thrush (*Turdus varius*), shot near Clavering, Essex: Miller Christy.
CHEMICAL SOCIETY, at 8.—(1) Corydaline. Part VII. The Constitution of Corydaline; (2) The Relation of Corydaline to Berberine. The Oxidation of Berberine with Nitric Acid: J. J. Dobbie and A. Lauder.—The Magnetic Rotation of some Polyhydric Alcohols, Hexoses, and Disaccharoses: W. H. Perkin, F.R.S.—Stereoisomeric Halogen Derivatives of α -benzoylcamphor: H. O. Forster and F. M. G. Micklethwait.—Is Argon an Elementary Substance? G. Martin.
INSTITUTION OF ELECTRICAL ENGINEERS, at 8.
FRIDAY, DECEMBER 20.
INSTITUTION OF CIVIL ENGINEERS, at 8.—Transmission Dynamometers: A. M. Morgan.
INSTITUTION OF MECHANICAL ENGINEERS, at 8.—The Microscopical Examination of the Alloys of Copper and Tin: W. Campbell.

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