

juices of seven species of the chicory family were found in qualitative agreement containing caoutchouc, two stearin-like alcohols, lactucerosol and other substances.—E. Feyertag and J. Zellner (xvii.): *Rhododendron hirsutum*.—J. Zellner: Chemistry of halophytes. Those on the eastern shore of the Neusiedler See near Vienna are rich in sulphates.—R. Seka and O. Schmidt: Nitro-derivatives of dinaphthanthracene-diquinone and their transformations.

## Diary of Societies.

### SATURDAY, JANUARY 1.

ROYAL INSTITUTION OF GREAT BRITAIN, at 3.—Prof. A. V. Hill: Nerves and Muscles: How we Feel and Move: (3) The Heart and some other Muscles.

### MONDAY, JANUARY 3.

ROYAL GEOGRAPHICAL SOCIETY (at Æolian Hall), at 3.30.—F. Rodd: Camels and Caravans (Christmas Lecture for Young People).

VICTORIA INSTITUTE (at Central Buildings, Westminster), at 4.30.—Capt. T. W. E. Higgins: Man and his God: The Origin of Religion in the Gentle World as taught by St. Paul.

INSTITUTION OF AUTOMOBILE ENGINEERS (Western Centre) (at Merchant Venturers' Technical College, Bristol), at 6.45.—Prof. W. Morgan: The Optical Indicator as a Means of Examining Combustion in Internal Combustion Engines.

SOCIETY OF CHEMICAL INDUSTRY (London Section) (at Chemical Society), at 8.—J. H. Coste and Col. Butler: Modern Developments in the Treatment of Sewage.

ROYAL INSTITUTE OF BRITISH ARCHITECTS, at 8.—B. Anrep: Mosaics.

### TUESDAY, JANUARY 4.

ROYAL INSTITUTION OF GREAT BRITAIN, at 3.—Prof. A. V. Hill: Nerves and Muscles: How we Feel and Move: (4) The Lungs and Blood: How the Muscles get Air and Fuel.

INSTITUTION OF AUTOMOBILE ENGINEERS (at Royal Society of Arts), at 7.—Dr. B. A. Keen: The Place of the Tractor in Soil Cultivation.

ROYAL PHOTOGRAPHIC SOCIETY OF GREAT BRITAIN, at 7.—M. Adams: Impressions of America and Canada—Photographic and otherwise.

HULL CHEMICAL AND ENGINEERING SOCIETY (at Hull), at 7.45.—G. H. M. Hutchinson: Refrigeration.

INSTITUTION OF AUTOMOBILE ENGINEERS (Coventry Graduates' Meeting) (at Broadgate Café, Coventry), at 7.45.—W. N. Haynes: Recent Developments in Motor Cycle Engine Design.

### WEDNESDAY, JANUARY 5.

ROYAL SOCIETY OF ARTS, at 3.—Prof. C. R. Darling: The Story of a Wireless Valve (Dr. Mann Juvenile Lectures) (1).

PHILOSOPHICAL SOCIETY OF ENGLAND (at 138 Piccadilly), at 4.30.—Rev. J. B. Jaggard: The Philosophy of Faith.

GEOLOGICAL SOCIETY, at 5.30.—C. S. Elton: The Nature and Origin of Soil-Polygons in Spitsbergen.—Dr. F. Dixey: The Tertiary and Post-Tertiary Lacustrine Sediments of the Nyasan Rift-Valley.

ROYAL SOCIETY OF MEDICINE (Comparative Medicine and Tropical Diseases and Parasitology Sections), at 5.30.—Discussion on Trypanosomiasis in Man and Animals.

INSTITUTION OF ELECTRICAL ENGINEERS (Wireless Section), at 6.—G. H. Nash and others: Informal discussion on The Acoustic Problems of Microphones and Loud-Speakers.

INSTITUTION OF HEATING AND VENTILATING ENGINEERS (at Caxton Hall), at 7.—R. E. Herring: The Supervision during Erection and Maintenance of a Low Pressure Hot Water Heating Apparatus.

ROYAL MICROSCOPICAL SOCIETY (Biological Section).  
NORTH-EAST COAST INSTITUTION OF ENGINEERS AND SHIPBUILDERS (Middlesbrough Branch, Graduate Section) (at Middlesbrough).—C. Boast: Marine Condensing Plant.

### THURSDAY, JANUARY 6.

ROYAL INSTITUTION OF GREAT BRITAIN, at 3.—Prof. A. V. Hill: Nerves and Muscles: How we Feel and Move: (5) Nerves and Muscles Working Together.

INSTITUTION OF ELECTRICAL ENGINEERS, at 6.—A. R. Cooper: Electrical Equipment of Track on the Underground Railways of London.

INSTITUTION OF THE RUBBER INDUSTRY (Birmingham and District Section) (at Grand Hotel, Birmingham), at 7.—A. W. T. Hyde: Physical Tests and their Significance.

SOCIETY OF CHEMICAL INDUSTRY (Bristol Section, jointly with Fuel Section) (at Bristol University), at 7.50.

SOCIETY OF DYERS AND COLOURISTS (West Riding Section) (at Bradford).—Prof. F. M. Rowe: Soledon Colours (SDC) and their Development on Cotton and Wool.

INSTITUTION OF MECHANICAL ENGINEERS (Manchester Branch) (at Manchester).—R. Potter: Pulverised Fuel.

### FRIDAY, JANUARY 7.

ROYAL GEOGRAPHICAL SOCIETY (at Æolian Hall), at 3.30.—J. H. Reynolds: A Little Journey in the Kingdom of Iceland (Christmas Lecture for Young People).

INSTITUTION OF ELECTRICAL ENGINEERS (South Midland Centre) (at Engineering and Scientific Club, Wolverhampton), at 7.—W. Wilson: Electrical Research.

INSTITUTION OF MECHANICAL ENGINEERS (Informal Meeting), at 7.—Dr. C. H. Lander: Developments in the Carbonisation of Coal.

ROYAL PHOTOGRAPHIC SOCIETY OF GREAT BRITAIN (Pictorial Group), at 7.

PHOTOMICROGRAPHIC SOCIETY (at 4 Fetter Lane), at 7.—F. Martin Duncan: Notes on the Photography of Plant Tissues.

SOCIETY OF CHEMICAL INDUSTRY (Manchester Section) (at 16 St. Mary's Parsonage, Manchester), at 7.—Short Papers.  
GEOLOGISTS' ASSOCIATION (at University College), at 7.30.  
JUNIOR INSTITUTION OF ENGINEERS, at 7.30.—P. J. Haler: Distortion in Heat-treated Case-hardened Carbon Steels.

### SATURDAY, JANUARY 8.

ROYAL INSTITUTION OF GREAT BRITAIN, at 3.—Prof. A. V. Hill: Nerves and Muscles: How we Feel and Move: (6) Speed, Strength, and Endurance.

### CONFERENCES.

ANNUAL CONFERENCE OF EDUCATIONAL ASSOCIATIONS (at University College).

Thursday, December 30, at 8.—Sir Henry A. Miers: The Choice of What is Good for Others (Presidential Address).

Friday, December 31, at 11.30 A.M.—Earl of Clarendon: Empire Settlement and Development.—King Alfred School Society, at 3.—J. Wicksteed: The Evolutionary Value of Co-Education.—Royal Drawing Society, at 5.30.—H. E. Peacock and P. Griffith: The Education and Development of Æsthetic Ability in Young People.

Saturday, January 1.—Educational Handwork Association, at 2.—J. H. Everett: The Teaching of Practical Elementary Science.—Leply House, at 3.—Discussion: The Periodical Observation. Its Use for Observational and Regional Survey Work.—International Language (Ido), at 5.—G. H. Richardson: International Language: The Present Situation and the Prospect.

Monday, January 3.—Eugenics Society, at 11 A.M.—Prof. E. W. MacBride: The Nature and Origin of Racial Differences.—British Psychological Society (Education Section), at 6.—Discussion: S. J. F. Philpot, Miss Barbara Low, and others: The Cinema in Relation to the Mind of the Child.—British Association for Physical Training, at 5.30.—C. S. Thomson: Hygiene and Physical Training.

Tuesday, January 4.—School Nature Study Union, at 3.—Dr. E. J. Salisbury: Salt Marsh Vegetation.

Wednesday, January 5.—Society for Experiment and Research in Education, at 10.30 A.M.—J. H. Whitehouse and others: Creative Education.—Child Study Society, at 5.30.—Miss Lillian Barker: The Girl Delinquent.—British Esperanto Association, at 5.30.—Rev. Prof. T. G. Bailey: Esperanto in the World to-day.

Thursday, January 6.—National League for Health, Maternity, and Child Welfare, at 5.—Miss Gardner, Dr. R. J. M. Horne, and others: Discussion: Open Air Schools.—London Head Teachers' Association, at 5.—W. A. Brockington and Prof. Godfrey Thomson: Technique of Examination.

Friday, January 7.—British Broadcasting Company, at 11 A.M.—J. C. Stobart and others.

GEOGRAPHICAL ASSOCIATION (at London School of Economics, Houghton Street, Aldwych, W.C.2).

Thursday, January 6, at 11.30 A.M.—Major C. Patrick: Mapping from Air Photographs.—At 5.—Miss Eileen Power: Trans-Asiatic Caravan Routes in Ancient and Modern Times.—At 8.—J. Fairgrieve: Geography Teaching in Primary Schools.—Sir Henry G. Lyons: Geography in the Universities.

Friday, January 7, at 10 A.M.—Prof. H. J. Fleure: The Teaching of Geography.—At 11.45.—Sir C. F. Close: Population Problems of the Empire (Presidential Address).—At 2.—Col. Jack: The Work of the Ordnance Survey Department.

Saturday, January 8, at 10 A.M.—Prof. T. P. Nunn: Boy Scout Geography.—At 11.30.—Mrs. Ormsby: Regional Survey in a Large City.

### JANUARY 3 AND 4.

MATHEMATICAL ASSOCIATION (Annual Meeting) (at London Day Training College).

Monday, January 3, at 5.30.—Prof. R. W. Genese: An Elementary Exposition of the Methods of Grassmann.

Tuesday, January 4, at 10.30 A.M. to 12.30.—Prof. M. J. M. Hill: The Teaching of Mathematics (Presidential Address).—Prof. A. Lodge: The Importance of Including in School Work the Graphic Solution of Quadratic Equations.—G. Goodwill and others: Discussion on The Choice of Units in the Teaching of Mechanics.—A. C. Heath: On the Approximation to Irrational Numbers by Rationals.—At 2.30 to 4.15.—Prof. H. F. Baker: Can the Range of Geometry taught in Schools be Widened?—W. C. Fletcher: Geometrical Congruence.—A. T. Edwards and others: Discussion on The Relation of Art to Mathematics.

### EXHIBITION.

#### JANUARY 4, 5, AND 6.

SEVENTEENTH ANNUAL EXHIBITION OF THE PHYSICAL SOCIETY AND THE OPTICAL SOCIETY (at Imperial College of Science and Technology, South Kensington), from 8 to 6 and from 7 to 10.

January 4, at 8.—Prof. E. N. da C. Andrade: Reproduction with Contemporary Apparatus, of a Physical Lecture of the Early Eighteenth Century.

January 5, at 8.—Dr. C. V. Drysdale: A Lecture on Progress in Electrical Instrument Design and Construction.

January 6, at 8.—J. L. Baird: A Lecture on Television.

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