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END OF THE ONE HUNDRED AND EIGHTEENTH VOLUME (SERIES A).
MINUTES OF MEETINGS OF THE ROYAL SOCIETY.

January 26, 1928.

Sir Ernest RUTHERFORD, O.M., President, in the Chair.

The following papers were read:

I. "The Deformation of Crystals of β-Brass." By G. I. TAYLOR, F.R.S.


III. "The Behaviour of a Single Crystal of α-Iron subjected to Alternating Torsional Stresses." By H. GOUGH. Communicated by Sir Thomas STANTON, F.R.S.


VI. "The Internal Conversion of γ-Rays." By B. SWIRLES. Communicated by R. H. FOWLER, F.R.S.

VII. "On the Input Limit of an X-Ray Tube with a Circular Focus." By A. MÜLLER. Communicated by Sir William BRAGG, F.R.S.


IX. "The Specific Heats of Ferromagnetic Substances." By L. F. BATES. Communicated by A. W. PORTER, F.R.S.

X. "The Ultra-Violet Band System of Carbon Monosulphide, and its Relation to those of Carbon Monoxide (the 4th Positive Bands) and Silicon Monoxide." By W. JEVONS. Communicated by A. FOWLER, F.R.S.

XI. "Tribo-Electricity and Friction." Parts II, III. By P. E. SHAW and C. S. JEX. Communicated by Sir William HARDY, F.R.S.

XIII. "Note on the Explanation of a so-called Interraction Phenomenon." By N. K. Adam. Communicated by G. I. Taylor, F.R.S.

XIV. "The Polarity of Thunderstorms." By B. F. J. Schonland. Communicated by C. T. R. Wilson, F.R.S.

XV. "The Interchange of Electricity between Thunderclouds and the Earth." By B. F. J. Schonland. Communicated by C. T. R. Wilson, F.R.S.


XVII. "On a Method of Determining the State of Polarity of Downcoming Wireless Waves." By E. V. Appleton, F.R.S., and J. A. Ratcliffe.

XVIII. "The Effect of Compressibility on the Lift of an Aerofoil." By H. Glauert. Communicated by G. I. Taylor, F.R.S.


XXII. "Wave Resistance." By T. H. Havelock, F.R.S.


February 2, 1928.

Sir Ernest RUTHERFORD, O.M., President, in the Chair.

The following papers were read:—

I. "The Air-Resistance to a Runner." By A. V. Hill, F.R.S.

II. "On the Embryology of a Mysid Crustacean, Hemimysis Lamorinae." By S. M. Manton. Communicated by J. S. Gardiner, F.R.S.
III. "Immunological and Serological Studies on the Viruses of Fowl-Pox and Vaccinia." By G. M. Findlay. Communicated by J. A. Murray, F.R.S.


VI. "Cytological Studies on the Viruses of Fowl-Pox and Vaccinia." By R. J. Ludford. Communicated by J. A. Murray, F.R.S.


VIII. "On the Ear Region of Certain of the Chrysochloridae." By C. F. Cooper. Communicated by J. T. Wilson, F.R.S.

IX. "The Brain of Ornithorhynchus." By M. Hines. Communicated by J. T. Wilson, F.R.S.

X. "The Development of some of the Cranial Muscles of Ganoid Fishes." By F. H. Edgeworth. Communicated by J. P. Hill, F.R.S.

XI. "Changes in the Ovary of the Mouse following Exposure to X-Rays." Part IV. By F. W. R. Brambell, U. Fielding, and A. S. Parkes. Communicated by J. P. Hill, F.R.S.

February 9, 1928.

Sir Richard GLAZE BROOK, Vice-President and Foreign Secretary, in the Chair.

The following papers were read:—

I. "On the Extraction of Electrons from Cold Conductors in Intense Electric Fields." By O. W. Richardson, F.R.S.

II. "The Restored Electron Theory of Metals and Thermionic Formulae." By R. H. Fowler, F.R.S.

III. "The Photo-electric Threshold Frequency and the Thermionic Work Function." By R. H. Fowler, F.R.S.

V. "On a Minimum Proper Time and its Application to (1) the Number of the Chemical Elements; (2) Some Uncertain Relations." By H. T. FLINT and O. W. RICHARDSON, F.R.S.

VI. "Some Cases of Instability of Fluids." By H. JEFFREYS, F.R.S.

VII. "Relativity and the Quantum Theory." By H. T. FLINT. Communicated by O. W. RICHARDSON, F.R.S.

VIII. "A Theory of Internal Ballistics based on a Pressure Index Law of Burning for Propellants." By C. A. CLEMMOW. Communicated by Sir George HADCOCK, F.R.S.

IX. "The Emission of Light by Flames containing Sodium and the Absorption of Light by Mercury Vapour." By H. A. WILSON, F.R.S.

X. "The Kinetics of the Combination of Hydrogen and Oxygen." By C. N. HINSHELWOOD and H. W. THOMPSON. Communicated by Sir Harold HARTLEY, F.R.S.

XI. "On Electrostatics in a Gravitational Field." By E. T. COPSON. Communicated by E. T. WHITTAKER, F.R.S.

XII. "Examples of the Zeeman Effect at Intermediate Strengths of Magnetic Field." By K. DARWIN. Communicated by C. G. DARWIN, F.R.S.

XIII. "The Analysis of the Absorption Spectrum of Cobalt Chloride in Concentrated Hydrochloric Acid." By W. R. BRODE. Communicated by E. C. C. BALLY, F.R.S.

February 16, 1928.

Sir Ernest RUTHERFORD, O.M., President, in the Chair.

The names of Candidates recommended for election into the Society were read from the Chair, as follows:—

Dr. G. V. Anrep. 
Prof. H. Bateman. 
Prof. C. H. Browning. 
Mr. S. S. Cook. 
Mr. W. D. Dye. 
Prof. C. C. Farr. 
Dr. M. Greenwood. 
Dr. J. W. H. Harrison. 

Prof. W. N. Haworth. 
Dr. D. Keilin. 
Prof. F. L. Kitchin. 
Mr. F. S. Macaulay. 
Prof. S. B. Schryver. 
Prof. W. Stiles. 
Prof. R. Whytlaw-Gray.
The following papers were read:—


II. "The Chemical Constant of Hydrogen Vapour and the Failure of Nernst's Heat Theorem." By R. H. Fowler, F.R.S.


VI. "On a New Effect in the Electric Discharge." By T. R. Merton, F.R.S.


IX. "The Heating Effects of Thorium and Radium Products." By S. W. Watson and M. C. Henderson. Communicated by Sir Ernest Rutherford, Pres. R.S.


February 23, 1928.

Sir Ernest RUTHERFORD, O.M., President, in the Chair.

The following papers were read:—

I. "The Yearly Variations in Plague in India in Relation to Climate: Forecasting Epidemics." By Sir Leonard Rogers, F.R.S.

III. "On the Production of Silk by Species of the Genus Hilara Meig. (Diptera)." By H. ELTRINGHAM. Communicated by E. B. POULTON, F.R.S.

IV. "On the Epigamic Behaviour of Hilara maura, Fab., and two Allied Species." By A. H. HAMM. Communicated by E. B. POULTON, F.R.S.

V. "Agricultural Value of Rainfall in the Tropics." By H. M. LEAKE. Communicated by Sir John FARMER, F.R.S.

March 1, 1928.

Sir Ernest RUTHERFORD, O.M., President, in the Chair.

The following papers were read:

I. "The Hexahydrated Double Sulphates containing Thallium." By A. E. H. Tutton, F.R.S.

II. "The Hexahydrated Double Selenates containing Thallium." By A. E. H. Tutton, F.R.S.

III. "The Distribution of Intensity in the Band Spectrum of Helium: the Band \( \lambda 4650 \)." By W. H. J. CHILDs. Communicated by O. W. RICHARDSON, F.R.S.

IV. "Studies in the Behaviour of Hydrogen and Mercury at the Electrode Surfaces of Spectrum Tubes." By M. C. JOHNSON. Communicated by S. W. J. SMITH, F.R.S.

V. "The Structure of the Band Spectrum of Helium." By W. E. CURTIS. Communicated by T. H. HAVELock, F.R.S.

VI. "The Saha Theory and the Conductivity of Flames containing Alkali Metal Vapours." By H. A. WILSON, F.R.S.

VII. "Fluid Resistance to Moving Spheres." By R. G. LUNNON. Communicated by T. H. Havelock, F.R.S.

VIII. "On the Brownian Displacements and Thermal Diffusion of Grains Suspended in a Non-Uniform Fluid." By S. CHAPMAN, F.R.S.

IX. "The Solution of the Wave Equation for the Scattering of Particles by a Coulombian Centre of Force." By N. F. MOTT. Communicated by R. H. FOWLER, F.R.S.

X. "A Redetermination of the Velocities of Particles from Radium C, Thorium C and C'." By G. H. BRIGGS. Communicated by Sir Ernest RUTHERFORD, Pres.R.S.
March 15, 1928.

Sir Ernest RUTHERFORD, O.M., President, in the Chair.

A Discussion Meeting was held on the subject of "Intense Magnetic Fields," opened by the President, followed by Dr. P. Kapitza.

The following papers were read:—

I. "The Design Coils for the Production of Strong Magnetic Fields." By J. D. Cockcroft. Communicated by Sir Ernest Rutherford, Pres.R.S.

II. "The Band Spectrum of Water Vapour." By D. Jack. Communicated by O. W. Richardson, F.R.S.


IV. "The Light of the Night Sky: Its Intensity Variations when analysed by Colour Filter.—III." By Lord Rayleigh, F.R.S.

V. "Relativity and Wave Mechanics." By W. Wilson, F.R.S.

VI. "The Bending of a Centrally Loaded Plate supported at Two Opposite Edges." By A. E. H. Love, F.R.S.

VII. "Studies in Adhesion.—III." By M. Nottage. Communicated by Sir William Hardy, F.R.S.