

Transformations in the organism and elimination of formic acid and the formates: C. **Fleig**. In the intestines the formates can be converted into carbon dioxide, hydrogen, and a carbonate, chiefly by microbial action. In the veins there is probably an oxidation of a diastatic nature.—The brusque character of the activation of the pancreatic secretion by calcium salts: C. **Delezenne**.—Viviparous Diptera of the family of the Muscidae, with larvæ sometimes parasitic, sometimes vegetarian: J. Künckel **d'Herculeis**.—Histolysis, without phagocytosis, of the vibratory muscles of flight in queen ants: Charles **Janet**.—The fructification of pathogenic fungi in the interior of human tissues: Charles **Nicolle** and M. **Pinoy**.—Fundamental differences in the mechanism and evolution of the increase of resistance to infection according to the methods utilised: MM. **Charrin** and **Lévy-Franckel**. From experiments on rabbits it is concluded that anti-diphtheric serum behaves as a drug, the effects of which pass off, as it only acts during the time of its presence, the organism remaining inert. The toxin, on the contrary, causes a reaction on the part of the tissues, which, once set up, confers a new property on the cells which is more durable.—Researches on the transplantation of nerve ganglions: G. **Marinesco** and M. **Goldstein**.—Studies on the mechanism of the destruction of nerve-cells in old age and the pathological states: M. **Manouélian**. From the experiments given in detail the author concludes that in old age, as in pathological states, the nerve-cell undergoes similar changes. In the normal state the satellite cells play an important function in the ordinary working of the nerve-cell, but in old age these satellite cells exhibit a remarkable vitality; they multiply, attack the nerve-cell, penetrate its interior, and destroy it.—The different modes of volcanic activity in the chain of the Puys: Ph. **Glaizeaud**.—The sea floor between Madagascar, Réunion, and Mauritius: J. **Thoulet**.

## DIARY OF SOCIETIES.

### THURSDAY, FEBRUARY 28.

ROYAL SOCIETY, at 4.30.—On the Dispersion in Artificial Double Refraction: Dr. L. N. G. **Filon**.—The Occlusion of the Residual Gas by the Glass Walls of Vacuum Tubes: A. A. **Campbell Swinton**.—The Theory of Correlation for any Number of Variables, treated by a New System of Notation: G. **Udny Yule**.

### FRIDAY, MARCH 1.

INSTITUTION OF MECHANICAL ENGINEERS, at 8.—Discussion continued by Sir William H. **White, K.C.B.**, on the Eighth Report to the Alloys Research Committee: on the Properties of Alloys of Aluminium and Copper: Prof. H. C. H. **Carpenter** and C. A. **Edwards**. (Prof. **Carpenter** will reply to the Discussion.)  
GEOLOGISTS' ASSOCIATION, at 8.—A Geologist's Impressions of Mexico: M. M. **Allorge**.

### SATURDAY, MARCH 2.

ROYAL INSTITUTION, at 3.—Röntgen, Kathode, and Positive Rays: Prof. J. J. **Thomson, F.R.S.**

### MONDAY, MARCH 4.

VICTORIA INSTITUTE, at 4.30.—Orissa; its History and People: C. W. **Odling**.  
SOCIETY OF CHEMICAL INDUSTRY, at 8.—Exhibition of a Gas Calorimeter: Prof. C. V. **Boys, F.R.S.**—Four Years' Experience in Metering Producer Gas, and continuously recording its Calorific Power: Prof. R. **Threlfall, F.R.S.**

### TUESDAY, MARCH 5.

ROYAL INSTITUTION, at 3.—The Visual Apparatus of Man and Animals: Prof. **William Stirling**.  
SOCIETY OF ARTS, at 4.30.—British Malaya: Sir W. H. **Treacher, K.C.M.G.**  
INSTITUTION OF CIVIL ENGINEERS, at 8.—Continued discussion:—On the Limits of Thermal Efficiency in Internal-Combustion Motors: **Dugald Clerk**.—Paper:—The Construction of Overhead Electric Transmission Lines: A. P. **Trotter**.  
ZOOLOGICAL SOCIETY, at 8.30.

### WEDNESDAY, MARCH 6.

SOCIETY OF ARTS, at 8.—The Discovery of the South-eastern Coalfield: Prof. W. **Boyd Dawkins, F.R.S.**  
ENTOMOLOGICAL SOCIETY, at 8.—The Life-History of *Tetropium gabrieli*. Weise: Rev. G. A. **Crawshaw**.—Revision of the Chelischidæ and Forficulidæ: **Malcolm Burr**.—Descriptions of some New Butterflies from Tropical Africa: **Hamilton H. Druce**.  
SOCIETY OF PUBLIC ANALYSTS, at 8.—The Disposition and Analyses of Sewage Matters deposited on Superposed Surfaces: W. J. **Dibdin**.—The Composition of Milk: H. **Droop Richmond**.—Preservatives in Milk and Milk Products, (1) The Souring of Milk and the Effect of Preservatives thereon; (2) Notes on the Detection and Estimation of Preservatives: H. **Droop Richmond** and E. H. **Miller**.

### THURSDAY, MARCH 7.

ROYAL SOCIETY, at 4.30.—Probable Papers:—Experiments with Vacuum Gold-Leaf Electroscopes on the Mechanical Temperature Effects in Rarefied Gases: Dr. J. T. **Bottomley, F.R.S.**, and F. A. **King**.—On the Resistance of Air: A. **Mallock, F.R.S.**—Electric Furnace Reactions under High Gaseous Pressures: R. S. **Hutton** and J. E. **Petavel**.  
CHEMICAL SOCIETY, at 8.30.—The Constitution of Chaulmoogric and Hydnocarpic Acids: M. **Barrowcliff** and F. B. **Power**.—Volume Changes which accompany Transformations in the System  $\text{Na}_2\text{S}_2\text{O}_3, 5\text{H}_2\text{O}$ : H. M. **Dawson** and C. G. **Jackson**.  
AERONAUTICAL SOCIETY, at 8.—Wings v. Screws: Colonel J. D. **Fullerton, R.E.**—The Free Lever in the Flying Machine: Herr **Karl Milla**.—Theory of Sailing Flight: **José Weiss**.  
INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—The Transmission of Electrical Energy by Direct Current on the Series System: J. S. **Hibfield**.  
LINNEAN SOCIETY, at 8.—On the Development of the Frog: Miss N. F. **Layard**.—Biscayan Plankton, Decapoda: S. B. **Kemp**.—A Special Point in the Colour Adjustment of *Chamaeleon*: Prof. E. B. **Poulton, F.R.S.**—New Channel Island Plants: G. **Claridge Druce**.—Exhibitions: Specimens of *Nitella ornithopoda*, A. Br.: H. and J. **Groves**.—(1) Probate of the Will of **Richard Anthony Salisbury**; (2) Manuscripts of Dr. W. J. **Burchell**: Prof. E. B. **Poulton, F.R.S.**  
CIVIL AND MECHANICAL ENGINEERS' SOCIETY, at 8.—Types of Enclosed Steam Water Heaters: C. R. **Allensbv**.

### FRIDAY, MARCH 8.

ROYAL INSTITUTION, at 9.—Certain Seasonal Diseases of the Sheep, and the Means of Preventing Them: Prof. D. J. **Hamilton**.  
PHYSICAL SOCIETY, at 8.—The Rate of Recovery of Residual Charge in Electric Condensers: Prof. **Trouton** and Mr. **Russ**.—Experimental Mathematics: Mr. **Pichon**.—An Instrument to describe Families of Equiangular Spirals: Mr. **Blakesley**.—A Micromanometer: Mr. **Roberts**.  
INSTITUTION OF CIVIL ENGINEERS, at 8.—Corrugations on Tram-Rails: A. T. **Arnall**.  
MALACOLOGICAL SOCIETY, at 8.—On the Non-Marine Mollusca of the Mylne Collection: A. S. **Kennard** and B. B. **Woodward**.—Notes on Holocene Mollusca from Ightham: A. S. **Kennard** and B. B. **Woodward**.—Descriptions of Four New Species of *Melania* from New Ireland and Ke-lan-tan: H. B. **Preston**.—On the Arms of the Belemnite: G. C. **Crick**.

### SATURDAY, MARCH 9.

ROYAL INSTITUTION, at 3.—Röntgen, Kathode, and Positive Rays: Prof. J. J. **Thomson, F.R.S.**

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