

is regarded as an intoxication caused by fatigue and favoured by bad oxygenation of the blood.—R. Dalimier: Chemical vaccination of arsenical reactions.

May 29.—M. A. d'Arsonval in the chair.—H. Douvillé: The Orbitoids of Trinity Island.—J. Bergonié: The advantages from the hygienic, economic, and social points of view of a change in the number, time, and importance of meals. It is argued that the main meal of the day should be taken at 7.30 a.m., and a second and smaller meal at 6 p.m. The advantages of such a reduction of meals are set out.—S. Lefschetz: The multiple integrals of algebraic varieties.—N. Kryloff: Generalisations of the method of Walter Ritz.—J. K. de Férlet: The formation of integral equations admitting hyper-spherical functions as fundamental solutions.—F. Schrader: A map of the massif of Gavarnie and of Mont-Perdu.—G. Sizes: The intervals in Hindu and Arabian music.—Ed. Chauvenet: The combinations of zirconium with sulphuric acid. Twelve compounds of zirconium with sulphuric acid have been described; the author has only obtained evidence of six of these.—G. Bourguignon: Normal chronaxy of the muscles of the lower limb in man. Functional and radicular classification by chronaxy.—Ch. Dhéré and G. Vegezzi: Helicorubin. This red pigment is found in the bile of the snail. Details of the changes in the absorption spectrum under the influence of various chemical reagents. In slightly acid media it is easily oxidised and reduced, and in the intestine of the snail behaves as a respiratory pigment.—H. Vincent and G. Stodel: The influence of traumatism on experimental gas gangrene and on the recrudescence of this infection. *B. perforans* may be injected into healthy tissue without visible effect, but it does not immediately disappear; it is latent for a certain period, and may reappear as the result of a contusion.

June 4.—M. A. d'Arsonval in the chair.—J. Bousinesq: The equilibrium of a given homogeneous sandy mass under certain conditions.—P. Montel: Conformal representation.—W. Sierpinski: Some problems which imply non-measurable functions.—G. Fayet and A. Schauasse: Elements of the comet 1917b (Schauasse). The elements are calculated from observations made on April 25 and May 8, 14, and 22.—MM. Portevin and Garvin: The influence of the velocity of cooling on the transformation temperature and structure of carbon steels.—G. Arnaud: Some Microthyriaceae.—M. Amar: Remarks on meal times. A destructive criticism of the proposals of M. Bergonié (see above), the main point of which is that food is not necessarily utilised immediately after it has been eaten. Two main meals at noon and 8 p.m. are regarded as justified from the point of view of experimental hygiene and the laws of human energetics.—L. Camus: The time necessary for the appearance of the anti-virulent property of serum is a function of the quantity of vaccine inoculated.

BOOKS RECEIVED.

- A Psychic Vigil in Three Watches. Second edition. Pp. xi+233. (London: Methuen and Co., Ltd.) 5s. net.
- The Mothercraft Manual. By M. L. Read. Pp. xviii+440. (London: G. G. Harrap and Co.) 5s. net.
- A Pocket Book for Chemists, Chemical Manufacturers, etc. By T. Bayley. Eighth edition. Edited by R. Ensoll. Pp. xvi+425. (London: E. and F. N. Spon, Ltd.) 7s. 6d. net.
- Cotton Spinning. By W. Scott Taggart. Vol. ii. Fourth edition. Pp. xxviii+462+illustrations. (London: Macmillan and Co., Ltd.) 10s. net.

NO. 2485, VOL. 99]

DIARY OF SOCIETIES.

THURSDAY, JUNE 14.

ROYAL SOCIETY, at 4.30.—Some Cases of Wave Motion due to a Submerged Obstacle: Prof. T. H. Havelock.—The Propagation of Sound in the Free Atmosphere and the Acoustic Efficiency of Fog Signal Machinery: Prof. L. V. King.—The Behaviour of Scattering Media in Fully Diffused Light: H. J. Shannon, F. F. Renwick, and B. V. Storr.—The Theory of Decay in Radio-active Luminous Compounds: J. W. T. Walsh.  
 MATHEMATICAL SOCIETY, at 5.30.—Some Theorems on the Multiplication of Series: A. E. Jolliffe.—Certain Trigonometrical Series and their Applications to the Theory of Numbers: S. Ramanujan.  
 OPTICAL SOCIETY, at 8.—Aeroplane Compasses: S. G. Starling.—An Optical Method for Accurately Dividing a Circle into Degrees: Dr. R. S. Clay.

FRIDAY, JUNE 15.

INSTITUTION OF MINING ENGINEERS, at 11 a.m.—The Spontaneous Firing of Coal: Dr. J. S. Haldane.—The By-product Coking Process, its History, Development, and Application: E. Bury.—Acetylene Mine Lamps: W. Maurice.

MONDAY, JUNE 18.

ROYAL GEOGRAPHICAL SOCIETY, at 8.30.—The Zambezi-Congo Watershed: Major E. A. Steel.  
 VICTORIA INSTITUTE, at 4.30.—Annual Address: The Distances of the Stars: Sir F. W. Dyson.

TUESDAY, JUNE 19.

ROYAL STATISTICAL SOCIETY, at 5.15.—Statistical Aspects of Inflation of the Currency: Prof. J. Shield Nicholson.  
 MINERALOGICAL SOCIETY, at 5.30.—The Problem of Sartorite: Dr. G. F. Herbert Smith.—Note on a Curious Case of Devitrification: Dr. A. Scott.—The Meteorites of Simondium, Eagle Station and Amana: Dr. G. T. Prior.

WEDNESDAY, JUNE 20.

ROYAL METEOROLOGICAL SOCIETY, at 5.—The Reduction of Temperature Observations to Mean of 24 Hours, and the Elucidation of the Diurnal Variation, in the Continent of Africa: C. E. P. Brooks.—Autographic Records of the Air-wave from the East London Explosion, January 19, 1917: F. J. W. Whipple.—Some Aspects of the Cold Period, December, 1916, to April, 1917: R. C. Mossman.  
 GEOLOGICAL SOCIETY, at 5.30.—The Inferior Oolite and Contiguous Deposits of the Crewkerne District (Somerset): L. Richardson.—The Pre-Cambrian and Associated Rocks of the District of Mozambique: A. Holmes.  
 ROYAL MICROSCOPICAL SOCIETY, at 8.—*Nouria rugosa*, a New Species of Foraminifera from the Farøe Channel: E. Heron-Allen and A. Earland.

CONTENTS.

	PAGE
Psychological Medicine. By Sir Robert Armstrong-Jones	301
Philosophy and Paradox. By G. B. M.	302
Some Aspects of Textile Manufacture. By W. M. G.	303
Our Bookshelf	304
Letters to the Editor:—	
A Letter of Ch. Darwin in Argentina.—M. Doello-Jurado	305
Plated Teeth of Sheep.—Dr. James Ritchie	306
The Organisation of Scientific Literature.—Philip E. B. Jourdain	306
The Origin of Flint.—Dr. R. M. Caven	306
The Society of Chemical Industry and the Progress of the Chemical Arts	307
The Radiation of the Stars. By Prof. A. S. Eddington, F.R.S.	308
Dr. W. H. Besant, F.R.S. By G. B. M.	310
Notes	311
Our Astronomical Column:—	
Comet 1917b (Schauasse)	315
The Spectrum of Comet 1917a (Mellish)	315
Effective Temperatures of Stars	315
The Fellowship of the Royal Society	315
The Animal Symbol of the Egyptian Deity, Set. (Illustrated.) By Joseph Offord	316
Technical Optics	317
The Configurations of Astronomical Masses and the Figure of the Earth. By J. H. Jeans, F.R.S.	317
University and Educational Intelligence	318
Societies and Academies	318
Books Received	320
Diary of Societies	320

Editorial and Publishing Offices:

MACMILLAN AND CO., LTD.,  
 ST. MARTIN'S STREET, LONDON, W.C.2.

Advertisements and business letters to be addressed to the Publishers.

Editorial Communications to the Editor.

Telegraphic Address: PHUSIS, LONDON.  
 Telephone Number: GERRARD 8830.