

quakes.—M. Hamy : A particular case of diffraction of the images of circular stars.—E. Ariès : The necessity of improving the Clausius equation of state. In the Clausius equation.

$$p = \frac{RT}{v-a} - \frac{\phi(T)}{(v+\beta)^2}$$

it is proposed to replace the two constants α and β by two functions of the temperature, and it is shown that the main advantages of the original equation are not lost. A. Blondel : The direct measurement of the angle of internal decalage of an alternator.—G. Julia : Rational substitutions.—M. Akimoff : Fourier-Bessel transcendentials with several variables. M. Mesnager : The rigorous demonstration of the formulæ of rectangular beams and plates.—A. Léauté : Complement to M. Blondel's theory on the induction reaction of alternators.—F. Delhaye and M. Sluys : The erosion valley of the Congo and its tectonic antecedents.—P. Brodin and F. Saint-Girons : Researches on the leucocytes of blood from tuberculous subjects. For data to be of value, the leucocytes must be taken daily for a considerable period. The higher the proportion of polynuclear leucocytes, and the higher the total number present, the graver the prognosis.—MM. Nicolle, Fayet, and Truche : The treatment of epizootic lymphangitis by means of autolysed yeast juice. An account of the technique proposed and the results obtained. F. Diéniert : What are activated muds? The muds causing rapid nitrification of sewage contain chalk (50 per cent.) and albuminoids (20 per cent.), the remaining 30 per cent. being non-albuminoid.—J. Belot and H. Fraudet : The localisation of foreign bodies in the eyeball and the muscles of the eye.—A. Cabanes : Antiseptic treatment by chloroform. A stream of oxygen containing alcohol and chloroform vapour is circulated through the wound. Purulent secretions diminish rapidly under this treatment, and leucocytic reactions are increased.—J. Bridré : Leucocytotherapy or aseptic pyotherapy. Its use in lymphangitis of the horse.

BOOKS RECEIVED.

The Advanced Montessori Method. By M. Montessori. i., Spontaneous Activity in Education. Translated by F. Simmonds and L. Hutchinson. Pp. vii+357. (London: W. Heinemann.) 6s. net.

Annuaire Astronomique et Météorologique pour 1918. By C. Flammarion. Pp. 364. (Paris: C. Flammarion.) 3 francs.

The Wellcome Photographic Exposure Record and Diary, 1918. Northern Hemisphere and Tropics. Pp. 256. (London: Burroughs Wellcome and Co.)

Resistance of Air. By Lt.-Col. R. de Villamil. Pp. x+192. (London: E. and F. N. Spø, Ltd.) 7s. 6d. net.

Short Logarithmic and other Tables. By Dr. W. C. Unwin. Sixth edition. Pp. 43. (London: E. and F. N. Spø, Ltd.) 1s. 6d. net.

The Practice of Pharmacy. Sixth edition. By Dr. J. P. Remington, assisted by E. F. Cook. Pp. xxviii+25-1987. (London: J. B. Lippincott Co.) 35s. net.

The Gate of Remembrance: The Story of the Psychological Experiment which Resulted in the Discovery of the Edgar Chapel at Glastonbury. By F. B. Bond. Pp. x+176. (Oxford: B. H. Blackwell.) 6s. net.

Educational Reform. By the Rt. Hon. H. A. L. Fisher. Pp. 15. (London: Longmans and Co.) 2d. net.

Troubles Locomoteurs Consecutifs aux Plaies de Guerre. By Prof. A. Broca. Pp. 155. (Paris: Masson et Cie.) 4 francs.

NO. 2517, VOL. 100]

DIARY OF SOCIETIES.

THURSDAY, JANUARY 24.

ROYAL SOCIETY, at 4.30.—Graphical Solution for High-angle Fire: Prof. A. N. Whitehead.—Flocculation: Spencer Pickering.—Revolving Fluid in the Atmosphere: Dr. J. Aitken.—Ultra-violet Transparency of the Lower Atmosphere and its Relative Poverty in Ozone: Hon. R. J. Strutt.—The Presence in the Solar Spectrum of the Water-vapour Band λ 3064: Prof. A. Fowler.—The Ultra-violet Band of Ammonia and its Occurrence in the Solar Spectrum: Prof. A. Fowler and C. C. L. Gregory. INSTITUTION OF ELECTRICAL ENGINEERS, at 6.—Telephone Exchange Transfers and their Organisation: F. G. C. Baldwin.

FRIDAY, JANUARY 25.

ROYAL INSTITUTION, at 5.30.—The Motion of Electrons in Gases: Prof. J. S. Townsend.

PHYSICAL SOCIETY, at 5.—Presidential Address: Prof. C. V. Boys, F.R.S.

SATURDAY, JANUARY 26.

ROYAL INSTITUTION, at 3.—The Chemical Action of Light: Prof. W. J. Pope.

MONDAY, JANUARY 28.

ROYAL GEOGRAPHICAL SOCIETY, at 8.30.—East Africa: General Smuts. ROYAL SOCIETY OF ARTS, at 4.30.—High-temperature Processes and Products: C. R. Darling.

TUESDAY, JANUARY 29.

ROYAL INSTITUTION, at 3.—Palestine and Mesopotamia: Prof. Flinders Petrie.

WEDNESDAY, JANUARY 30.

ROYAL SOCIETY OF ARTS, at 5.—The Manufacture of Margarine in Great Britain: Sir William G. Watson, Bart.

THURSDAY, JANUARY 31.

ROYAL SOCIETY, at 4.30.—Probable Papers: The Growth of Trees: A. Mallock.—Action of Light Rays on Organic Compounds, and the Photosynthesis of Organic from Inorganic Compounds in Presence of Inorganic Colloids: Prof. B. Moore and T. A. Webster.—The Isolation and Serological Differentiation of *Bacillus tetani*: Capt. W. J. Tulloch.—An Investigation into the Periodicity of Measles Epidemics in the Different Districts of London for the years 1890-1912: Dr. J. Brownlee.

ROYAL INSTITUTION, at 3.—Revolving Fluid and the Weather Map: Sir Napier Shaw.

FRIDAY, FEBRUARY 1.

ROYAL INSTITUTION, at 5.30.—Gravitation and the Principle of Relativity: Prof. A. S. Eddington.

SATURDAY, FEBRUARY 2.

ROYAL INSTITUTION, at 3.—The Ethics of the War: P. H. Loyson.

CONTENTS.

PAGE

The Elements of Refrigeration. By Prof. J. Wemyss Anderson	401
New Guinea as a Centre for Plant Distribution. By A. W. H.	402
Histology of Vegetable Drugs	402
Our Bookshelf	403
Letters to the Editor:—	
Ice Thistles.—J. H. Coste	404
Science in Industrial Reconstruction	404
The Fertiliser Situation in the United States. By Dr. E. J. Russell, F.R.S.	406
What Determines Stature?	407
Notes	408
Our Astronomical Column:—	
Encke's Comet	412
Solar Observations at Madrid	412
Spectra of Jupiter and Saturn	412
The Setting of Cements. By C. H. D.	413
Secondary-School Examinations and Advanced Courses	413
German Economics and Technology	414
The New Integral Calculus. By G. B. M.	414
Meteorology in the Argentine Republic	415
The Needs of Our Education at the Present Day, with Special Reference to Science Teaching. By Sir H. H. Johnston, G.C.M.G., K.C.B.	415
The Meteorological Resources of the Empire. By Major H. G. Lyons, F.R.S.	416
University and Educational Intelligence	417
Societies and Academies	419
Books Received	420
Diary of Societies	420

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