DACT

and M. Polonowski: Determination of the total nonamino organic acids of the urine .--- H. Colin : The diastatic hydrolysis of inulin. An account of some unsuccessful attempts to isolate products of hydrolysis intermediate between inulin and the reducing sugars.-J. E. Abelous and J. Aloy: Digestive hydro-lyses by mechanical ionisation of water. Violent agitation is sufficient to determine a partial hydrolysis of solutions of starch, lactose, neutral fats, and fibrin. The effects increase with rise of temperature.-J. Chaine: Considerations on the paramastoid apophysis of man.—A. Krempi: Observations on the develop-ment of Pocillopora cespitosa and Seriatopora subulata. Discovery of primitive stages revealing the scyphostrobiliary origin of the Anthozoa.—MM. Weinberg and Nasta: Rôle of the hæmolysins in microbial intoxication and the therapeutic properties of normal sera .--- A. Marie, C. Levaditi, and G. Banu : Experimental transmission of the triponeme of general paralysis (virus neurotrope) by sexual contact.

## Books Received.

The Idea of Progress: An Inquiry into its Origin and Growth. By Prof. J. B. Bury. Pp. xv+377. (London: Macmillan and Co., Ltd.) 14s. net.

Nauka Polska. Tom ii. Pp. ix+676. (Warszawa.) Cena M.P. 25

Dumbartonshire. By Dr. F. Mort. Pp. viii+155. (Cambridge: At the University Press.) 4s. 6d. net. Orknev and Shetland. By J. G. F. Moodie and H. and T. Mainland. Pp. xii+167. (Cambridge: At the University Press.) 4s. 6d. net.

Report on the Quantum Theory of Spectra. By Dr. L. Silberstein. Pp. iv+42. (London: Adam Hilger, Ltd.) 5s. net. Problems of Population and Parenthood: Being

the Second Report of and the Chief Evidence taken by the National Birth-Rate Commission, 1918-20. Pp. clxvi+423. (London: Chapman and Hall, Ltd.) 25s. net.

Diary of Societies.

THURSDAY, MAY 20. ROYAL INSTITUTION OF GREAT BRITAIN, at 3.-A. P. Graves: Welsh and

- ROYAL INSTITUTION OF GREAT BRITAIN, at 3.—A. F. Graves: weisn and Irish Folk Song. ROYAL SOCIETY at 4.30.—Prof. J. N. Collie: Some Notes on Krypton and Xenon.—Sih Ling Ting: Experiments on Electron Emission from Hot Bodies, with a Preface by Prof. O. W. Richardson.— Dr L. Silberstein: The Aspherical Nucleus Theory Applied to the Balmer Series of Hydrogen.—U'r. T. E. Stanton, Miss D. Marshall, and Mrs C. N. Bryant: The Conditions at the Boundary of a Fluid in Turbulant Motion.

Balmer Series of Hydrogen.—<sup>1</sup> r. T. E. Stanton, Miss D. Marshall, and Mrs C. N. Bryant : The Conditions at the Boundary of a Fluid in Turbulent Motion.
ROVAL SOCIETY OF ARTS (Indian Section), at 4.30.—Brig.-Gen. Lord Montagu of Beaulieu : Roads and Transport in India
ROVAL SOCIETY OF MEDICINE (Dermatology Section), at 5.—Annual General Meeting.
INSTITUTION OF MINING AND METALLURGY (at Geological Society), at 5.30.—G. Rigg: Roasting and Lead-Smelting Practice at the Port Pirie (S.A.) Plant of the Broken Hill Associated Smelters Proprietary, Ltd.—Capt. H. Tatham: Tunnelling in the Sand Dunes of the Belgian Coast.
INSTITUTION OF ELECTRICAL ENGINEERS (at Institution of Civil Engineers), at 5.30.—(Annual General Meeting.)
NUMISMATIC SOCIETY, at 7.30.—B. K. Johnson: The No. 7 Dial Sight, Mk II.—Lt.-(ol. Gifford : A Short High Power Telescope.
CHEMICAL SOCIETY (Ordinary Meeting; Informal Meeting), at 8.—D. J. and Mrs. Matthews: Exhibit demonstrating the Methods of Controlling Soil Organisms now being Investigated at the Rothamsted Experimentand Sation.—Dr. Marie Stopes: Fxhibit Specimens and Microscopic Slides of Fusain, Durain, Clarain, and Vitrain, the Four Main Constituents of Banded Bituminous Coal.—E. R. Thomas: Experiments Illustrating the Influence of Iemperature, Concentration, Solvent, Constitution, and Catalyst on the Rate of Chemical Change. SOCIETY OF ANTIQUARIES, at 8.30

FRIDAY, MAY 21.

ROYAL SOCIETY OF MEDICINE (Otology Section), at 5 .- Annual General Meeting. WIRELPSS SOCIETY OF LONDON (at Institution of Civil Engineers), at 6. – P. Coursey: Some Methods of Eliminating Atmospherics in Wireless

- Reception. Rocation. Roval Society of MEDICINE (Electro-Therapeutics Section), at 8.30.— Annual General Meeting.

NO. 2638, VOL. 105

ROVAL INSTITUTION OF GREAT BRITAIN, at 9.-Prof. J. A. Fleming: The Thermionic Valve in Wireless Telegraphy and Telephony. SATURDAY, MAY 22.

ROYAL INSTITUTION OF GREAT BRITAIN, at 3.—Frederic Harrison: The Re-action and the Critics of the Positivist School of Thought. TUESDAY, MAY 25.

ROYAL INSTITUTION OF GREAT BRITAIN. at 3.-Major C. E. Inglis: The Evolution of Large Bridge Construction.

WEDNESDAY, MAY 26.

ROYAL AERONAUTICAL SOCIETY (at Royal Society of Arts), at 8.—Sir Richard T. Glazebrook; Some Points of Importance in the Work of the Advisory Committee for Aeronautics.

## THURSDAY, MAY 27.

ROVAL INSTITUTION OF GREAT BRITAIN, at 3.-William Archer : Dreams, with Special Reference to Psycho-Analysis

LINNEAN SOCIETY (Anniversary Meeting), at 3. ROVAL SOCIETY, at 4.30.

CONCRETE INSTITUTE (Annual General Meeting, followed by an Ordinary Meeting), at 7.30.

## FRIDAY, MAY 28.

ROVAL SOCIETY OF ARTS (Indian and Colonial Sections, Joint Meeting), at 4.30.—Prof. W. A. Bone: Lignite.
ROVAL SOCIETY OF MEDICINE (Study of Disease in Children), at 4.30.— (Annual General Meeting.)
PHYSICAL SOCIETY OF LONDON, at 5.—Sir W. H. Bragg and Others Discussion on X ray Spectra.
ROVAL INSTITUTION OF GREAT BRITAIN, at 9.—Prof. W. L. Bragg: Crystal Structure.

SATURDAY, MAY 29.

ROYAL INSTITUTION OF GREAT BRITAIN, at 3.-Dr. J. H. Jeans: The Theory of Relativity (Tyndall Lectures).

## CONTENTS

CONTENIS	AGE
The Officers Training Corps and the Universities .	349
Relativity and Geometry. By E. Cunningham	350
Colloidal Therapy	352
Our Bookshelf	352
Letters to the Editor :-	55-
The Cost of Scientific PublicationsProf. G. H.	
Hardy, F.R.S.; Dr. A. B. Rendle, F.R.S.;	
Dr. B. Daydon Jackson; Dr. Charles S.	
Myers FRS	252
Myers, F.R.S The Indian Chemical Service.—Dr. M. W. Travers,	353
F.R.S.	254
A New Method for Approximate Evaluation of	354
Definite Integrals between Finite LimitsA. F.	
	254
British and Metric Systems of Weights and Measures.	354
M. E. Yeatman Scientific Apparatus and Laboratory Fittings.—	355
Conrad Beck; B. H. Morphy; C. Paker;	
Bellingham and Stanley, Ltd.; Wm. Taylor;	
H. W. Ashfield	
Naturally Fractured Eccene Flints -J. Reid Moir.	355
International Council for Fishery Investigations.	358
Prof. W. C. McIntosh, F.R S.	0
Prof. W. C. McIntosh, F.K.S.	358
Sea and Sky at SunsetLtCol. K. E. Edge-	
worth; J. S. D. Scientific Research.—Dr. John W. Evans, F.R.S.	358
	358
Imperial Air Routes. (Illustrated.)	359
Helium: Its Discovery and Applications. (Illus-	
trated.) By Dr. William J. S. Lockyer	360
	363
Obituary :	,
Principal R. M. Burrows	364
Notes	366
Our Astronomical Column :	
A Bright Fireball .	370
Conjunction of Mercury with e Geminorum	370
Longitude by Wireless Telegraphy . Periodicity in Weather and Crops. By W. W. B.	370
Periodicity in Weather and Crops. By W. W. B.	370
The National Food Supply	371
The Research Association. By J. W. E	372
Solid Lubricants. By L. A.	372
Greek Science and Philosophy	373
Life-history of the Periwinkle.	
The Royal Society Conversazione	373
University and Educational Intelligence	376
Societies and Academies	377
Books Received	380
Diary of Societies	280