for the Year ended 31st March, 1920. Pp. vii+242. (London: H.M. Stationery Office.) 2s. net.

Ministry. Meteorological Office. Air Rainfall, 1919. The Fifty-ninth Annual Volume of the British Rainfall Organization. Pp. xxviii+268. (London: H.M. Stationery Office.) 12s. 6d. net.

L'Alimentation et l'Elevage Rationnels du Bétail. (Opinions du Prof. A. Mallèvre.) By J.-E. Lucas. Pp. 466+4. (Paris: Librairie Lefrançois.) 18 francs.

The University of Chicago. Publications of the Yerkes Observatory. Vol. iv., part iii. Parallaxes of Fifty-two Stars. By G. van Biesbroeck and Mrs. H. S. Pettit. Pp. 36. (Chicago: University of Chicago Press; London: Cambridge University Press.) 1.50 dollars net.

Hydro-Electric Survey of India. Vol. ii. Second Report on the Water Power Resources of India. Ascertained during the Season 1919-20. By F. E. Bull and J. W. Meares. Pp. 123. (Calcutta: Government Printing Office.) 1.6 rupees.

Analysa Kvalitativní pro Posluchače (Začátečníky) České University. (Qualitative Analysis for Students (Beginners) of the Bohemian University.) By Prof. Dr. B. Brauner and Dr. J. Křepelka. Pp. 179. (Prague: Československé Lékánické Společnosti.)

Geologists' Association, London. An Index to the Proceedings of the Geologists' Association, vols. xxi.-xxx., 1909-19. Pp. 44. (London: E. Stanford, Ltd.)

Design and Tradition: A Short Account of the Principles and Historic Development of Architecture and the Applied Arts. By A. Fenn. Pp. xx+376+ plates. (London: Chapman and Hall, Ltd.) 30s. net.

The Growth and Shedding of the Antler of the Deer: The Histological Phenomena and their Relation to the Growth of Bone. By W. Macewen. Pp. xvii+109.

(Glasgow: Maclehose, Jackson and Co.; London: Macmillan and Co., Ltd.) 10s. 6d. net.

The Principle of Relativity. Original Papers by A. Einstein and H. Minkowski. Translated into A. Einstein and H. Minkowski. Translated into English by M. N. Saha and S. N. Bose. Pp. xxiii+ 186. (Calcutta: University.)

Diary of Societies.

THURSDAY, JANUARY 6.

ROYAL SOCIETY OF ARTS, at 3.—Sir Frederick Bridge: The Ories of London which Children heard in Shakespeare's Time (Juvenile Lecture).

ROYAL INSTITUTION OF GREAT BRITAIN, at 3.—Prof. J. Arthur Thomson: The Haunts of Life: The Freshwaters (Juvenile Lectures). Physical Society and Offical Society's Exhibition (at Imperial College of Science), from 3 to 10.—At 4.—Prof. A. Barr: The Optophone.—At 8.—C. R. Darling: Some Unusual Surface Tension Phonomens

ROYAL SOCIETY OF MEDICINE (Obstetrics and Gynæcology Section), at 8.—Dr. Louise McIlroy: The Use of Morphia in Labour.—P. Cole: A Series of 43 Cases of Inoperable Uterine Carcinoma treated by the Cold Cautery Method of Percy.

FRIDAY, JANUARY 7.

ROYAL GEOGRAPHICAL SOCIETY (at Æolian Hall), at 3.30.—Lt.-Col. C. Smith: Life on the Gilgit Frontier (Christmas Lecture). JUNIOR INSTITTION OF ENGINEERS (at Caxton Hall), at 8.—H. G. Pusey: The Indicator: Its Use and Application.

SATURDAY, JANUARY 8.

ROYAL INSTITUTION OF GREAT BRITAIN, at 3.—Prof. J. Arthur Thomson: The Haunts of Life: The Conquest of the Land (Juvenile

MONDAY, JANUARY 10.

INSTITUTION OF MECHANICAL ENGINEERS (Graduates' Meeting), at 7 .-A. H. Fuller: The Artificial Production of Ice.
Survexons' Instruction, at 8.—W. W. Jenkinson: The Streets of
London before the Great Fire.
ROYAL GEOSHAPHICAL SOCIETY (at Æolian Hall), at 8.30.—Capt.
J. B. L. Noel: A Reconnaissance in Persia North of the Elburz.

TUESDAY, JANUARY 11.

ROTAL INSTITUTION OF GREAT BRITAIN, at 3.—Prof. J. Arthur Thomson: The Haunts of Life: The Mastery of the Air (Juvenile son: The Lectures).

NO. 2671, VOL. 106]

ROYAL HORTICULTURAL SOCIETY, at 3. INSTITUTION OF CIVIL ENGINEERS, at 5.30.
INSTITUTE OF INDUSTRIAL ADMINISTRATION (in Central Hall, Westminster), at 7 .- W. J. Malden: The Measure of Output in Agri-

culture.

ROYAL PHOTOGRAPHIC SOCIETY OF GREAT BRITAIN, at 7.—J. Rheinberg: Some New Directions for Photographic Research.—F, C. Toy: A Monochromatic Illuminator of Special Design.

QUEEKT MICROSCOPICAL CLUE (at 11 Chandos Street, W.1), at 7.30.

ROYAL ANTHROPOLOGICAL INSTITUTE, at 8.15.—Prof. C. G. Seligman: The Older Palæolithic Age in Egypt.

ROYAL SOCIETY OF MEDICINE (Psychiatry Section), at 8.30.—Dr. Morowoka: The Morbid Conditions of the Choroid Plexus in Mental Disease (Illustrated by Epidiascope).

WEDNESDAY, January 12.

ROYAL SOCIETY OF ARTS, at 8 .- Dr. C. S. Myers: Industrial Fatigue (Aldred Lecture).

Institution of Automobile Engineers (at Institution of Mechanical Engineers), at 8.—Capt. S. Bramley-Moore: Recent Developments in Transmission.

THURSDAY, JANUARY 13 THURSDAY, JANUARY 13

LONDON MATHEMATICAL SOCIETY (at Royal Astronomical Society), at 5.

—A. C. Dixon: The Theory of a Thin Elastic Plate, Bounded by Two Circular Ares and Clamped.—A. S. Eddington: Dr. Sheppard's Method of Reduction of Error by Linear Compounding.—M. Kössler: The Zeros of Analytic Functions.—G. A. Mille: Determination of all the Characteristic Sub-groups of an Abelian Group.—E. A. Milne: A Problem concerning the Maxima of Certain Types of Sums and Integrals.—H. J. Priestley: The Linear Differential Equation of the Second Order.—W. F. Sheppard: Conjugate Sets of Quantities.

INSTITUTION OF ELECTRICAL ENGINEERS (at Institution of Civil Engineers), at 6.—Sir William Bragg: Electrons (Kelvin Lecture).

ture).
OPTICAL SOCIETY (at Imperial College of Science), at 7.45.—
Prof. W. Salomonson: A New Ophthalmoscope.—H. Dennis Taylor:
An Anastigmatic Flat Field Telescope and its Application to
Prismatic Binoculars.—Inst.-Comdr. T. Y. Baker: A Note on
Multiple Reflection.
ROYAL SOCIETY OF MEDICINE (Neurology Section), at 8.30.—Informal
Meeting for Free Discussion.

FRIDAY, JANUARY 14.

ROYAL ASTRONOMICAL SOCIETY, at 5.

ROYAL SOCIETY OF MEDICINE (Clinical Section), at 5.30.

ROYAL SOCIETY OF MEDICINE (Ophthalmology Section), at 8.30.—

Dr. R. Pickard: Variations in the Size of the Physiological Cup, and their Relation to Glaucoma.—B. T. Lang: Scotometry.

CONTENTS.	PAGE
The Cost of Education	. 589
Territory and Bird Behaviour. By C. Ll. M.	590
Airscrews in Design and Performance	590
Nomography Metallurgy for Dental Surgeons. By T. M. L.	593
Our Bookshelf Letters to the Editor:	594
Letters to the Editor:—	
Heredity and Acquired Characters.—Sir G. Archdall	
Reid, K.B E The British Committee for Aiding Men of Letters	596
The British Committee for Aiding Men of Letters	-
and Science in Russia Lord Montagu of	0
Beaulieu, and Others	598
The Pea-crab (Pinnotheres pisum).—Right Hon.	
Sir Herbert Maxwell, Bart., F.R.S	599
The Mechanics of Solidity Dr. H. S. Allen	599
The Meteorology of the Antarctic Dr. G. C.	
Simpson, F.R.S. The Mammals of South Africa. (Illustrated.)	599
The Mammals of South Africa. (Illustrated.)	600
Science of Ventilation and Open-air Treatment.	
By M. F. The Discovery of Fossil Remains of Man in Java,	601
The Discovery of Fossil Remains of Man in Java,	
Australia, and South Africa. By Prof. A. Keith,	
F.R.S	603
Obi-uary	605
Notes	606
Our Astronomical Column:-	
Comets	610
Comets Disappearance of Saturn's Rings	610
Kodaikanal Observatory	610
Kodaikanal Observatory	
Frederick Andrewes, F.R.S	611
Wheat from Seed-bed to Breakfast-table	614
The Origin of Primary Ore Deposits	615
University and Educational Intelligence	615
Calendar of Scie tific Pioneers	617
Societies and Academies	617
Books Received	619
Books Received	
	024