

importance of quantitative measurements of deafness in connection with the army.—P. Bazy: Delayed tetanus. The immunity given by the antitetanus serum lasts only fifteen days, and under certain conditions tetanus may develop as long as fifty days after infection. Injections every eight days for a month are suggested as a safeguard.—A. Policard, B. Desplas, and A. Phélip: Biological researches on wounds received in battle. The microbial flora and its relations with the clinical evolution and the characters of the wound.

BOOKS RECEIVED.

Anatomic des Clausilies Danoises. By C. M. Steenberg, i., Les Organes Génitaux. Pp. 44 (Kobenhavn: Bianco Lunas.)

The British Journal Photographic Almanac, 1916. Pp. 984. (London: H. Greenwood and Co., Ltd.) 1s. net.

Transactions of the Geological Society of Glasgow. Vol. xv., part 3. Pp. 297-437. (Glasgow: Geological Society.) 7s. 6d.

Mathematical Papers for Admission into the Royal Military Academy and the Royal Military College. September-November, 1915. Edited by R. M. Milne. Pp. 30. (London: Macmillan and Co., Ltd.) 1s. net.

Wisconsin Geological and Natural History Survey. Bulletin xlii. Educational Series, No. 5: The Geography of the Fox-Winnebago Valley. By Prof. R. H. Whitbeck. Pp. 105. (Madison, Wis.)

A Bird Calendar for Northern India. By D. Dewar. Pp. 211. (London: W. Thacker and Co.) 6s.

Forerunners and Rivals of Christianity, being Studies in Religious History from 330 B.C. to 330 A.D. By F. Legge. 2 vols. Vol. i., pp. lxiii+202. Vol. ii., pp. ix+425. (Cambridge: At the University Press.) 2 vols., 25s. net.

Commerce and Industry. By Prof. J. R. Smith. Pp. viii+596. (New York: H. Holt and Co.) 1.40 dollars.

Memoirs of the Geological Survey of India. Palæontologia Indica. New Series. Vol. vi. Memoir No. 1. Supplementary Memoir on New Ordovician and Silurian Fossils from the Northern Shan States. By Dr. F. R. C. Reed. Pp. vii+100+xii plates. (Calcutta: Geological Survey; London: Kegan Paul and Co., Ltd.) 4s.

DIARY OF SOCIETIES.

THURSDAY, FEBRUARY 17.

ROYAL SOCIETY, at 4.30.—The Action of Cobra Venom: Prof. A. R. Cushny and S. Yagi.—Gametogenesis and Sex D-termination in the Gall-fly, *Neuroterus lenticularis*. III.: Dr. L. Doncaster.—The Structure and Development of the Skull and Larvæal Cartilages of Perameles, with Notes on the Cranial Nerves: Philippa C. Esdaile.—Physiological Investigations with Petiole-Pulvinus Preparation of Mimosa Pudica: J. C. Bose and S. C. Das.

ROYAL INSTITUTION, at 3.—Variable Stars: Sir F. W. Dyson.

ROYAL GEOGRAPHICAL SOCIETY, at 5.—A Synthetic Method of Determining Geographical Regions: Dr. J. F. Unstead.

INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—Kelvin Lecture: Terrestrial Magnetism: Dr. C. Chree.

ROYAL SOCIETY OF ARTS, at 4.30.—The Saints of Pandharpur: C. A. Kincaid, C.V.O.

LINNEAN SOCIETY, at 5.—John Bartram; the Pioneer American Botanist: Miss C. Herring-Browne.—Acorn Producing Twin Plants: Miss M. Rathbone.—Winter and Summer Coloration of the Ermine, *Putorius ermineus*: E. S. Goodrich.—The Infestation of Bamboos in Tidal Waters by *Balanus amphitrite* and *Teredo navalis* in Tenasserim: E. P. Siebbing.

FRIDAY, FEBRUARY 18.

ROYAL INSTITUTION, at 5.30. Polarised Light and its Application to Engineering: Prof. E. G. Coker.

INSTITUTION OF MECHANICAL ENGINEERS, at 6.—Annual General Meeting.—Chisels: H. Fowler.

MONDAY, FEBRUARY 21.

ROYAL SOCIETY OF ARTS, at 4.30.—National and Historic Buildings in the War Zone; their Beauty and their Ruin: Rev. G. H. West.

ROYAL GEOGRAPHICAL SOCIETY, at 8.30.—The Valley of Mexico: A. P. Maudslayi.

NO. 2416, VOL. 96]

TUESDAY, FEBRUARY 22.

ROYAL INSTITUTION, at 3.—Nerve Tone and Posture: Prof. C. S. Sherrington.

ZOOLOGICAL SOCIETY, at 5.30.—Studies on the Anoplura and Mallophaga, being a Report upon a Collection from the Society's Gardens. I.: B. F. Cummings.—Further Observations on the Intestinal Tract of Mammals: Dr. F. Chalmers Mitchell.

ILLUMINATING ENGINEERING SOCIETY, at 8.—Discussion: Some Future Possibilities in the Design of Instruments for Measuring Illumination (with Special Reference to Photometers Depending on Physical and Chemical Methods).

INSTITUTION OF CIVIL ENGINEERS, at 5.30.—The Main Drainage of Cairo: C. C. James.

WEDNESDAY, FEBRUARY 23.

ROYAL SOCIETY OF ARTS, at 4.30.—Serbia as seen by a Red Cross Worker: Miss H. B. Hanson.

GEOLOGICAL SOCIETY, at 5.30.—The Origin of some River-Gorges in Cornwall and Devon: H. Dewey.

THURSDAY, FEBRUARY 24.

ROYAL SOCIETY, at 4.30.—*Probable Papers*: Mathematical Contributions to the Theory of Evolution. XIX. Second Supplement to a Memoir on Skew Variation: Karl Pearson.—The Relative Combining Volumes of Hydrogen and Oxygen: F. P. Burt and E. C. Edgar.—Speed Effect and Recovery in Slow-speed Alternating Stress Tests: W. Mason.

ROYAL INSTITUTION, at 3.—The Milky Way and Magellanic Clouds: Sir F. W. Dyson.

CHILD STUDY SOCIETY, at 6.—Psychological Problems arising out of the War: C. Bart.

FRIDAY, FEBRUARY 25.

ROYAL INSTITUTION, at 5.30.—The Commerce of Thought: Sir A. Quiller Couch.

CONTENTS.

	PAGE
Science in the Public Schools and the Civil Service	671
Catalysis	673
The study of Variable Stars. By H. E. Goodson	674
Our Bookshelf	675
Letters to the Editor:—	
The Place of Science in Education.—Sir E. A. Schäfer, F.R.S.	676
Relations between the K and L Series of the High-Frequency Spectra.—Manne Siegbahn	676
Educational Work in Museums.—Dr. W. M. Tattersall	676
A Relation between Atomic Weights and Radio-active Constants. (<i>With Diagram</i>).—A. van den Broek	677
Asteroids Feeding upon Living Sea-Anemones.—H. C. Chadwick	677
Colourless Crystals of Hæmoglobin.—Prof. A. E. Boycott, F.R.S.	677
Tubular Rock Structures. (<i>Illustrated</i>).—George Abbott	677
Wild Amazonia. (<i>Illustrated</i>).	678
The American State and Household Science. By A. S.	680
The Closing of Museums	680
Notes	682
Our Astronomical Column:—	
Comet 1915e (Taylor)	686
Secondary Nuclei of Comet 1915a (Mellish)	686
On the Mean Distances and Luminosities of Stars of Different Spectral Types	686
Anomalous Dispersion in the Sun	686
British Production of Synthetic Dyes	686
The Daily Food Ration of Great Britain. By Prof. W. H. Thompson	687
Harvard Contributions to Physics	690
Forthcoming Books of Science	690
The Organisation of Scientific Research. By Prof. J. A. Fleming, F.R.S.	692
University and Educational Intelligence	696
Societies and Academies	697
Books Received	698
Diary of Societies	698

Editorial and Publishing Offices:

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

Advertisements and business letters to be addressed to the Publishers

Editorial Communications to the Editor.

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