derivatives of isostatic suspension bridges, and the latter are only particular cases of one single and unique system which includes all.—M. Siegbahn: High-frequency spectra. Some of the work recently published by MM. R. Ledoux-Lebard and A. Dauvillier has been anticipated by the author and E. Friman (Phil. Mag., July, 1916).—P. Chevenard: The mechanism of the tempering of carbon steels. The results of the experiments described completely confirm the conclusions recently published by MM. Portevin and Garvin.—A. Portevin: The manganese steels. The steels were submitted to very slow cooling, seventy-five hours in cooling from 1300° to 100° C. The results, given in detail, differ considerably from the effect of a normal annealing (three to five hours from 1000° C.). -E. Urbain: A method of determining molecular weights. The method is based on determinations of the boiling point of a mixture of the liquid the molecular weight of which is to be measured with a nonmiscible liquid, such as water, and the composition of the distillate. Examples are given of the measurement of the molecular weights by this method of benzene, carbon tetrachloride, and limonene.—Mlle. Y. Dehorne: The presence of the genus Stromatoporella in the Senonian in the neighbourhood of Marticles (Pouches de Bahan). I Brates: The engl descriptions of the senonian in the neighbourhood of Marticles (Pouches de Bahan). tigues (Bouches-du-Rhône) .- L. Bordas: The egg deposition of Rhynchites conicus and the anatomy of its larva. This parasite has caused great damage to apple, pear, cherry, and peach trees in Rennes and its neighbourhood.—A. Compton: Cerebrospinal meningitis and meteorology

July 16.-M. Camille Jordan in the chair.-A. Lacroix: The felspathic ortho-amphibolites and orthopyroxenites of Madagascar.-G. Bigourdan: A gardenerastronomer of the seventeenth century, Elzéar Féronce: Calignon de Peyrins and the reciprocation of the pendulum.—G. Gouy: Interferences with large differences of path.—G. A. Bouleager: The evolution of the poison apparatus of snakes. Remarks on a recent communication of Mme. Marie Phisalix.—J. Priwaloff: The convergence of conjugated trigonometrical series. —E. Vessiot: The canonical equations and developments in series of celestial mechanics.—M. Amsler: The development in a continued fraction of a quadratic irrational.—V. M. Hegly: Flow over a weir in a free sheet with lateral contraction.—MM. Luizet and Guillaume: Occultations observed during the total eclipse of the moon of July 4, 1917, at the Lyons Observatory.—St. Procopiu: Induction apparatus for detection apparatus for detection apparatus for detection apparatus for detection apparatus. detecting projectiles in wounds. A modification of the Hughes induction balance in which a galvanometer replaces the telephone. The deviations of the galvanometer vary with the distance of the projectile from the surface.-A. Colani: Study of the system water, uranyl oxalate, sodium oxalate.—A. Pictet, O. Kaiser, and A. Labouchère: The alcohols and bases of vacuum tar. Six alcohols and six bases were isolated. alcohol of lowest boiling point was proved to be p-methylcyclohexanol (hexahydro-p-cresol). The other alcohols were not identified, but belong to the hydroaromatic series. It is probable that these alcohols exist in the coal, since the benzene extract contains these alcohols in practically the same proportions as the vacuum tar. -Em. Saillard: The action of acids on the rotatory power of saccharose and invert-sugar in the presence of soluble salts.—F. X. Skupienski: Sexuality in the Myxomycetes group of fungi.-Mme. M. Phisalix: The subjective value of the evolution of the poison apparatus of snakes and the physiological action of the poisons in systematic classification.—MM. Denier and Vernet: The bacteriological study of the natural coagulation of the latex of Hevea brasiliensis.—A. Policard and B. Desplas: The histological mechanism of granulation of wounds in man.

BOOKS RECEIVED.

Scientific Treatise on Smoke Abatement. By H. Hamilton. Pp. xiii+155. (Manchester: Sherratt and Hughes.) 5s. net.

History of the Spanish Conquest of Yucatan and of the Itzas. By P. A. Means. Pp. xv+2o6+plates. (Cambridge, Mass.: The Peabody Museum.)

Notes on the Order of my Categories and Alphabet. By R. E. Dennett. Pp. 18. (Lagos: Government Printer.)

The African Table of Periodic Law. By R. E. Dennett. Pp. 12. (Lagos: Government Printer.)

Studies in Psychology. Contributed by Colleagues and Former Students of E. Bradford Titchener. Pp. 337. (Worcester, Mass.: L. N. Wilson.)

Results of Atmospheric-Electric Observations made Aboard the *Galilee* (1907–8) and the *Carnegie* (1909–16). By L. A. Bauer and W. F. G. Swann. (Washington: Carnegie Institution.)

The Magnetic Work of the Galilee. By L. A. Bauer, W. J. Peters, and J. A. Fleming. (Washington: Carnegie Institution.)

The Magnetic Work of the Carnegie (1909–16). By L. A. Bauer, W. J. Peters, J. P. Ault, and J. A. Fleming. Some Discussions of the Ocean Magnetic Work (1905–16). By L. A. Bauer and W. J. Peters. (Washington: Carnegie Institution.)

A Class-Book of Organic Chemistry. By Prof. J. B. Cohen. Pp. viii+344. (London: Macmillan and Co., Ltd.) 4s. 6d.

CONTENTS. P	AGE
Charts and Projections	461
Mental Aspect of Sound. By J. G. M	
Our Bookshelf:-	
Taggart: "Cotton Spinning"	462
Bastin: "How to Know the Ferns."-C. H. W.	463
Findlay: "Chemistry in the Service of Man"	463
Chemistry and the War. By Sir T. E. Thorpe,	
C.B., F.R.S	463
Science and Industry. (Illustrated.)	465
Rainfall and Gunfire. By E. L. Hawke	467
Notes	468
Our Astronomical Column:-	
Discovery of a New Star	472
Stellar Motions and Absolute Magnitudes	472
Union Observatory, Johannesburg	472
The Examinations for Class I. of the Civil Service	473
Radio-active Halos. II. (With Diagram.) By Prof.	
J. Joly, F.R.S	476
University and Educational Intelligence	478
Societies and Academies	479
Books Received	480

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.