

years of school-life; and his biographer expressly says that older pupils who came to him for instruction went away disappointed. In short, his method, as modified and applied by his successors, has proved a useful auxiliary in early childhood to the regular system of education; but that is all that can be claimed for it. His love of children, however, and his ardent interest in the poor and ignorant, with his lifelong efforts for their improvement and elevation, are worthy of all praise. It is these noble qualities of the man that give the chief interest to his biography; and there is not a teacher anywhere that cannot learn something in this respect by a perusal of this work.

*The Electric Motor and its Applications.* By MARTIN and WETZLER. New York, W. J. Johnston. 4°. \$3.

THIS is a revised and enlarged edition of a work first published about two years ago, and reviewed in these columns at that time. While considerable space is given to the theoretical and historical views of the electric motor, the book is mainly devoted to its more modern development and application. The present work is in great part a reprint of the first edition, to which have been added nearly a hundred pages of new matter, thus giving a complete review of the subject treated down to the end of 1888. The new chapters contain a description of all the noteworthy motors and electric-railway systems introduced since the publication of the earlier edition, as well as a discussion of alternating-current and thermomagnetic motors. Thus the new portion of the book not only comprises instances in which electric power has advanced from the experimental stage to that of successful practice, but also casts a glance at the results which the future may be expected to yield. The book is worthy a place in the library of every electrician, and to the general reader it is not without interest.

*Examination of Water for Sanitary and Technical Purposes.* By HENRY LEFFMANN and WILLIAM BEAM. Philadelphia, Blakiston. \$1.25.

THIS is an admirable little manual of one hundred and six pages, giving in clear and concise language the most trustworthy and practicable processes for the examination of water. The soap-test for the determination of the hardness of water, which has been so long in use by chemists, has been abandoned by the authors as inaccurate, and in its place they have recommended the method devised by Hehner, in which sodium carbonate and sulphuric acid are employed. For the determination of nitrate and nitrites the calorimetric tests are advised to the exclusion of the more troublesome and uncertain processes heretofore in use. In order to have the advanced nomenclature and notation of the present time kept constantly in mind, a set of labels for the re-agents has been provided, and is furnished with the book. Among the special features of this volume are the chapters describing the action of water on lead, and the technical application to be deduced from an analysis of a given specimen of water, its action on boilers, etc.

*The Bacteria in Asiatic Cholera.* By E. KLEIN, M.D. London and New York, Macmillan. 16°. \$1.25.

THIS volume is a reprint of a series of articles published in the *Practitioner* in 1886 and 1887, together with a number of contributions which have since been made to the knowledge of the comma bacilli of Koch. Klein may be regarded as the most pronounced opponent of Koch's theory that the comma bacillus is the cause of Asiatic cholera. That he is, however, not the only one, is shown by the statement in the volume before us, that Baumgarten, Pettenkofer, and Emmerich in Germany; Roy, Sherrington, and Brown in England; and Shakspeare in America, — hold the same opinion as Klein. While denying the causal relation between the comma bacillus of Koch and *Cholera Asiatica*, Klein, nevertheless, recognizes its diagnostic importance. On this point he says he agrees to the proposition, that, if in any case of diarrhœa the choleraic comma bacilli can be shown both by the microscope and by culture-experiments to exist, then the suspicion that it may be a case of Asiatic cholera is quite justified: for if it should be found, that, in a locality which is in communication by sea or land with an infected country, one or more suspicious cases of diarrhœa had occurred, the demonstrations by culture-experiments of the

presence in the intestinal discharges of the choleraic comma bacilli would fully justify us in regarding such cases with grave suspicion as being probably, though not necessarily, choleraic. At all events, sanitary officers, for the sake of the public weal, would be justified in treating these cases as cases of cholera, and in taking measures of isolation and disinfection. It is impossible at the present time to decide between such men as Koch and Klein and their adherents. Each day new facts are being discovered, and views which seemed to rest on a firm foundation have had to be abandoned in the light of newly discovered evidence. Klein shows very plainly that many of Koch's earlier statements in reference to the presence or absence of the comma bacillus have already required great modifications. Fortunate it is that all are agreed, that, whether Koch's comma bacillus cause the Asiatic cholera or not, its presence is sufficient evidence of the existence of that disease to demand of sanitary officials the most rigid isolation of the suspicious case, and the most thorough disinfection of his clothing and surroundings.

*First Book of Nature.* By JAMES E. TALMAGE. Salt Lake City, Utah, Contributor Company.

THIS little book is designed to assist in the elementary study of the simplest objects of nature, — such as all people have more or less necessity of dealing with, — and as a help to mothers, and teachers in primary schools, will prove of great assistance. It deals with the simplest facts in the animal, vegetable, and mineral kingdoms, and such facts as every one ought to know. The ignorance of many of these simple facts on the part of many persons who are presumably educated is both lamentable and ridiculous. In a legal trial which occurred some time since, in which complaint was made that a crowing rooster was a nuisance, and kept in violation of an ordinance prohibiting the keeping of noisy animals in the city, it was maintained that an action could not lie, because a rooster was not an animal. Had those who held this opinion read this "First Book of Nature," such a blunder could not have been made.

#### AMONG THE PUBLISHERS.

"THE Voltaic Accumulator," an elementary treatise by Emile Reynier, translated from the French by J. A. Berly, C.E. (New York, E. & F. N. Spon), describes in a didactic manner the whole of the practical and scientific acquisitions made in the domain of the voltaic accumulator from Planté to our days. It brings together, summarizes, explains, and classifies the notions, theories, and inventions relating to secondary currents, and reviews the principal applications of the latter.

"Eight Hundred Miles in an Ambulance" is the title of a little volume of papers republished from *Lippincott's Magazine*, and describing the adventures of Mrs. Laura Winthrop Johnson in a journey across the Western plains with an army paymaster.

— Mr. B. P. Shillaber (Mrs. Partington) is writing his reminiscences of the last half-century.

— P. Blakiston, Son, & Co., medical and scientific publishers, booksellers, and importers, 1012 Walnut Street, Philadelphia, have just published the "Medical Directory of Philadelphia and Camden, 1889," containing lists of physicians of all schools of practice, dentists, druggists, veterinarians, and chemists, with information concerning medical societies, colleges, and associations, hospitals, asylums, charities, etc.; and "A Manual of Chemistry," for the use of medical students, by Brandreth Symonds, A.M., M.D., assistant physician Roosevelt Hospital, out-patient department, and attending physician Northwestern Dispensary, New York.

— Robert Carter & Brothers will publish, by arrangement with the author and English publisher, the autobiography of John G. Paton, missionary to the New Hebrides.

— John Wiley & Sons announce "Philosophy of the Steam-Engine Developed," by Professor Robert H. Thurston; "Composition, Digestibility, and Nutritive Value of Food," by Professor H. A. Mott; and "General Motions of the Atmosphere, Cyclones, Tornadoes, Water-Spouts, Hail-Stones, etc.," by Professor William Ferrel.