

in the north, where I shall be able to get many tales and reliable information from both natives and white men as to the *Katipo*, and will let you know when I come back. I drove over to a man who is said to have lost his arm through a *Katipo*, but I found that he does not know one when he sees it, did not see the bite inflicted, was in a place where the *Katipo* does not live, and when the arm was removed the bone was diseased (honeycombed). That is one of those tales people hear, and which make it difficult to believe any thing. I feel certain the *Katipo* is a very dangerously poisonous spider, but I never but once saw a case with my own eyes. It was many years ago, and I was out with a war party of Maoris. One night we found ourselves in an unpleasant position, as far as they were concerned. On our rear there were a number of nice hollow places to sleep in; but as these were Maori ovens, in which men had been cooked for a cannibal feast, the natives not only would not sleep in them, but they would not let me: so we lay down on the bare shingle beach, with no tent, in a high wind, and before us at a short distance was an island that is (they say) inhabited by evil spirits; so, with spirits both before and behind, we lay awake, talking in subdued whispers.

"I had my head on a rush bush; but they would have me shift it on to a rock, because they said the *Katipo* lived in the rushes by the seaside. I was anxious for them to sleep, knowing that tomorrow we would want all our strength; but it was no use, for by and by a man screamed out that the *Katipo* had bitten him, and in a moment lights were brought, and, sure enough, the *Katipo* was there, within a foot of the wound, under his mat. The arm swelled, but not so much as to give alarm. What alarmed me more were his weakness and languor, and the lowness of his pulse and his heart-action. The poison certainly was a powerful narcotic, if symptoms go for any thing. I gave him all the brandy we had, and the natives pretty well burned his wound, and rubbed and rubbed at him till they got him into a perspiration; but he did not properly recover for several days, and, if one had only known, it would have been a mercy to have let him die (which I believe he would). So I thought when I saw him gasping his life away with blood and froth flowing from his mouth. Ugh! That is one of the several scenes I do not care to think about. By the by, I could not get the specimen. The Maoris burned it, as they said the *Katipo* is an 'evil spirit, and, if we did not burn it, the man would die.' I have many chiefs here, and I asked them only to-day, but no one ever heard of but one *Katipo*, — the black spider, with a vermilion spot on the abdomen."

BOOK-REVIEWS.

A Text-Book of Pathology, Systematic and Practical. By D. J. HAMILTON, M.B. Vol. I. London and New York, Macmillan. 8°. \$6.25.

FROM the pen of the professor of pathological anatomy of the University of Aberdeen we should expect a text-book of pathology which would be both systematic and practical, and we are not disappointed. The first volume only has been published; but the second is in process of preparation, and will be issued with the least possible delay. The contents of the volume before us are divided into three parts. Part I. treats of the technique, including the *sectio cadaveris*, or autopsy, the preparation of tissues for detailed examination, and the microscope. In this portion of the work, practical bacteriology also is discussed. Part II. deals with general pathological processes, including infiltrations and degenerations, inflammation, suppuration, healing and organization, ulceration, and dropsy. In Part III. we find considered diseases of the various organs and tissues, new formations and tumors, diseases of the blood, the heart, and the blood-vessels. In an appendix are thoroughly described the methods of making casts and models, which are most important adjuncts to every pathological museum. The author promises us that in the second volume he will discuss systematic bacteriology *in extenso*; and, as this subject has now become so important, we shall look for this volume with great interest. The methods described in the volume before us are, as a rule, the most advanced and the best. We think that the method of making Esmarch's tubes might have been given more attention

than has been given to it, on account of its advantages over Koch's plate method. Nothing is said of rolling these tubes on ice, which is now done in most of the American laboratories, perhaps for the reason that the method is not known in the British Isles. It will be found by those who try it superior to cold water. Taken as a whole, we have nothing but praise for Mr. Hamilton's book; and, if it receives the attention of the medical profession of this country as it deserves, it will soon become the leading text-book of pathology in our medical colleges.

Elementary Text-Book of Zoölogy. By Dr. C. CLAUS. Tr. and ed. by Adam Sedgwick, M.A., and F. G. Heathcote, M.A. 2 vols. 2d ed. London and New York, Macmillan. 8°. \$8.

MR. SEDGWICK, lecturer of Trinity College, Cambridge, and examiner in zoölogy in the University of London, undertook the translation of this work of Claus ("Lehrbuch der Zoologie") to supply a want, which had long been felt in England by both teachers and students, of a good elementary book on this subject. The reputation of Professor Claus's works on zoölogy in Germany, and indeed throughout the civilized world, naturally suggested this one to Professor Sedgwick as the one best adapted to supply the deficiency which existed, and in the two volumes before us we have the most complete elementary text-book on this subject in the English language. Others, to the extent to which they go in the treatment of special subjects, may be equally good; but none that we have seen can claim the same degree of excellence and completeness combined. The work is illustrated with 706 woodcuts; and as to its general excellence, we need but call attention to who its publishers are.

Pestalozzi: his Aim and Work. By BARON ROGER DE GUIMPS. Tr. by Margaret C. Crombie. Syracuse, C. W. Bardeen. 12°. \$1.50.

THIS is a convenient biography of Pestalozzi by one of his own disciples; and Miss Crombie has rendered a service to English and American educators by bringing it out in their own language. The arrangement of the work is not always the best, and some points are not made so clear as might be wished; but nevertheless it gives a very fair account of Pestalozzi's life, and of his educational theory and practice. He was born in 1746, and quite early showed that interest in the education and moral elevation of the masses which was the ruling motive of his life. He first undertook to be a clergyman, but, not succeeding in that profession, attempted that of law, from which he was excluded by the Swiss authorities, to whom his political views were obnoxious. He then engaged for some years in farming, having in the mean time taken a wife; but his want of business skill led to ultimate failure, so that he was reduced almost to beggary. After this he tried his hand at authorship, in which he had some successes and some failures; and it was not until he was over fifty years of age that he found his true vocation of teaching, which thereafter continued to be his occupation most of the time during the remaining thirty years of his life. Every one of his schools ultimately came to a disastrous end, owing in great part to his own want of business skill and managing tact. Nevertheless, he was able to put in practice his new method of teaching, which, in the opinion of his admirers, is the greatest improvement ever made in education.

What this method was, his biographer does his best to explain yet he confesses in the end that "the world has not yet got a clear answer to the oft-repeated question, 'What is Pestalozzi's method?'" It seems evident, however, that it consisted mainly in what are now called object-lessons combined with drawing, while learning from books was almost totally excluded. He had, we are told, an utter contempt for book-learning, and he seems to have thought that the whole educational practice of the world for two thousand years had been wrong, and that nothing but a revolution would set things right. The accounts given in this book, however, do not justify any such inference. Pestalozzi tried his method first on his own son, with the result that the boy was not educated at all, but grew up an ignoramus. At the age of eleven he could not read, and when, at fourteen, he was sent to school, he made a complete failure in his studies, as he afterwards did in business. It is clear that Pestalozzi's method was only adapted to the earliest

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.