

date a certain number of those obscure problems which concern the nature and therapeutic value of mineral waters. One of the most original memoirs produced at the congress was that of Dr. Schlemmer, on microbes and thermal waters. According to the author, there is found a certain number of microbes in these waters; but, far from offering any danger, the microbes of mineral waters seem, on the contrary, to possess beneficial properties. It is thus that in certain springs of Vichy, Chantemesse and Frémont have isolated a micrococcus possessing a most pronounced digestive power on albuminoid alimentary substances, which it transforms into peptones. With the knowledge of this fact, it will be seen that it is impossible to imitate this natural mineral water by the aid of the bicarbonate of soda. No artificial chemical combination would be capable of conferring on a water this micro-organic life, any more than of conferring upon it the electro-dynamism of telluric elaboration. The origin of the gases contained in the mineral waters was well demonstrated by Dr. Labat. He stated that whether they proceed from the air or from watery vapor, or whether they are manifestations of the soil or of volcanoes, the gases do not ordinarily play a preponderating rôle in the curative action of mineral waters. Nevertheless, nitrogen is an agent distinctly sedative and anti-catarrhal; sulphuretted hydrogen, a modifier of the skin and of mucous membranes; carbonic acid, an excitant of the blood-vessels and nerves. It is capable, for instance, of arousing the languishing functions of the digestive mucous membrane.

BOOK-REVIEWS.

The Life-Work of the Author of Uncle Tom's Cabin. By FLO-
RINE THAYER MCCRAY. New York, Funk & Wagnalls. 12°. \$2.

THIS book contains both a biography of Mrs. Stowe and an analysis of her principal works. It is written with the approbation of the Stowe family, who have supplied information on certain points. It contains much that is interesting, and, so far as facts go, gives a fair picture of Mrs. Stowe and her work. But it is marred by an overflow of "gush," which is neither pleasing nor improving to the reader. Mrs. McCray is so enthusiastic over her theme that she can hardly write soberly, even in the most commonplace passages, and some of the most ordinary personages assume in her eyes the character of heroes. Thus, she says that certain sermons on intemperance by Lyman Beecher "shook the world," and that Professor Stowe, on another occasion "spoke eloquently and with magnetic force," and "stood forth a commanding figure upon the arena of the world's advancement." Of course, Mrs. Stowe herself is still more highly lauded. The book is a handsome one, but is marred by bad punctuation and by frequent misspellings, such as "Arabian Knights," "Thomas Carlisle" for "Thomas Carlyle," "Henrick Heine" for "Heinrich Heine," etc. Still the work has an interest from its subject, and also from the sincerity and earnestness of its author.

Hypnotism: Its History and Present Development. By FREDERIK BJÖRNSTRÖM, M.D. Tr. by Baron Nils Posse, M.G. New York, Humboldt Publ. Co. 8°. 75 cents.

THE general aspects and methods of hypnotism may be now regarded as sufficiently well understood to make a detailed review of the contents of a general *résumé* of the subject unnecessary. As, however, the available literature of standard merit in English is small, and much of this is in the way of translations, it may be useful to call attention to the present essay of an eminent Swedish physician, especially as its general accessibility will provide it with a large body of readers. The work is purely expository in character, and offers about as convenient an introduction to the subject as we have in English. The topics are well selected, the points clearly stated, and the whole fairly represents the present status of investigation upon this vexed phenomenon. A general historical introduction is followed by a chapter defining the ordinary hypnotic condition, according to various authorities. The method of hypnotizing and the stages of hypnotism are next interestingly discussed. The so-called "unilateral hypnotism" is needlessly honored with a special chapter, though the physical and the psychical effects of

hypnotism are more satisfactorily treated in succeeding chapters. As is proper, most space is given over to the phenomena of suggestion; in which, however, the selection of cases is not as judicious as it might be, considering the needs of the general reader. The concluding chapters treat of hypnotism as a remedial agent, as a moral remedy, in relation to the law, and, finally, its abuses and dangers. Considering the short space at command, the topics are fairly presented except the last, which concerns itself rather uselessly with Parisian methods of deceiving the credulous. The chief defect of the work, however, lies in its placing too nearly on a par views and theories the evidence for which is still regarded by the most able investigators as very different. This is true of the "hemi-hypnotic" phenomena; but it is still truer of the "mental suggestion," or telepathic experiments, to which entirely too much space is devoted. This somewhat uncritical treatment of the outlying fields of hypnotism is certainly the chief defect of the work. In spite of this, however, the work is a valuable addition to the easily accessible literature of the topic, and can safely be placed in the hands of the general reader, especially if he bring to the reading of it the understanding that the views expressed are partly individual, and partly prematurely positive.

Practical Electric Bell Fitting. By F. C. ALLSOP. London and New York, Spon. 12°. \$1.25.

THIS treatise on the fitting-up of electric bells and the apparatus necessary therefor supplies just the information on the subject that would naturally be needed by the average workman. Beginning with the proper way to join two pieces of wire, it goes carefully through all the ramifications of the subject, explaining, in a manner not easily misunderstood, each step, by means of well-worded text and a sufficient number of illustrations. The author shows that he not only thoroughly understands his subject, but that he knows how to treat it clearly and exhaustively without saying a word too much. Much of the thoroughness of the treatise is due, no doubt, to the manner in which it first appeared, or, rather, to the way in which it grew from that part of it which first appeared. The work was first published as a series of papers in a technical journal, and their favorable reception induced the author to re-issue it in book form, taking the opportunity to revise it according to the light gained by the comment and criticism accorded it in its serial form. Much additional matter was added also, the result of numerous questions addressed to him on the subject from time to time.

The points treated are grouped as follows. The first chapter is devoted to wiring, soldering, and joining wires, and earth connections. This is followed by a chapter on pushes, pulls, contacts, and switches, and another on bells, relays, and indicators. Batteries and the magneto bell have each a chapter devoted to them, followed by one on connecting-up. The last two chapters treat of the localizing of faults and of portable sets of apparatus. The book contains nearly a hundred and fifty explanatory engravings.

Proceedings of the Society for Psychical Research. Pt. XIV. June, 1889. London, Soc. Psych. Research. 8°.

THE varied contents of this issue testify to the vigorous activity of the society in the directions inaugurated in former publications. The most interesting and novel contribution is upon the curious phenomena of crystal-vision, an account of which will appear elsewhere in *Science*. The president's address is very brief, and contains hardly more than a report of progress, with renewed protests against misinterpretation of the society's work. A paper by the late Edmund Gurney, completed by F. W. H. Myers, treats of apparitions occurring soon after death, and in part refers the frequency of such apparitions to the emotional disturbances connected with the decease of a friend, and in part considers the matter as of super-normal significance. It cannot be said that any essential advance is made in the present discussion of cases. Mr. Myers also writes suggestively, though with a disproportion of introduction to thesis, upon the Dæmon of Socrates, explaining this vexed question as the appearance of the unconscious mind of Socrates through the medium of spoken language, just as the subconscious "strata of personality" reveal themselves in automatic writing. In the supplement we have an account of some very heterogeneous