

the guise of one in biology. Whether it agrees with the original meaning of the word "biology" or not, I care but little, for many other words of our language are very far to-day from their original significance, while a study of the principles shown by "matter in its living state," is certainly not very far from the significance of the words from which "biology" is derived.

H. T. FERNALD.

State College, Pa., June 9.

BOOK-REVIEWS.

Fifteenth Annual Report of the State Board of Health of the State of Connecticut, for the Seven Months Ending June 30, 1892.
New Haven, 1893.

IN addition to the customary features, the statistics upon the health of towns and the reports of local boards of health, this volume contains three papers under the heading "Miscellaneous." The first of these is by Dr. Herbert E. Smith, upon "Connecticut River Water as a Source of Typhoid Fever at Hartford." The unusual number of cases of typhoid fever in Hartford in the winter of 1891-92 led to an investigation by Dr. Smith, under the auspices of the State Board of Health. Dr. Smith has fixed the responsibility for the outbreak upon the water of the Connecticut River, which was supplied to citizens of Hartford during a large part of the months of October, November, and December. The period when the disease specially prevailed "corresponds with the time when cases originating in the use of the river-water must have appeared." From the evidence adduced by Dr. Smith there seems every reason to believe that typhoid germs, carried to the consumer by the river-water, were the cause of some fifteen deaths that otherwise might not have occurred. Dr. Smith suggests that the germs might have come from the sewers of Springfield, twenty-five miles up stream, and this seems certainly a likely supposition, if we are to judge from the history of similar epidemics.

The paper which follows this is by Dr. Charles J. Foote, upon "The Filtration of Water." It relates some experiments upon the Pasteur-Chamberlain filter, certain of which seem to indicate that defective packing around the porcelain may lead to the appearance of germs in the filtrate. As a result, partly of his own, partly of others' investigations, Dr. Foote concludes with the following practical advice: "We may conclude then, first, that the porcelain cylinder of a Pasteur filter should be cleansed once a week at least by boiling in water for an hour. A simple washing is not sufficient, since, when the porcelain is replaced, the living bacteria still remain in its pores and come through into the filtrate as soon as the water is turned on; second, that the filter should not be put in a position where it is near a range or any other apparatus giving out much heat, but put in a cold place; third, that a properly-constructed filter should be obtained, so that there is no chance of a leak around the packing."

The third paper is entitled, "Abstracts from a paper on the Duty of Public Disinfection following Acute Infectious Diseases," and is a remarkable production, as the following pregnant sentences may suggest: "One afternoon last December I sat upon the deck of the revenue cutter, 'Lot Morrill,' with the secretary of our State Board of Health." . . . "Smallpox has been lashed to hell by the agent vaccination, and like a whimpering hound is held securely in leash." . . . "Arms, arts, literature, science, all have their rewards, but not one of them surpasses in the magnificence of its gifts those of which the god-like science, medicine, is capable."

The Archæan Formation of the Abukuma Plateau. By B. KOTO.
Journal of the College of Science, Imperial University, Japan.
Vol. V., 1893. Plates.

THIS article of nearly one hundred pages and six well-executed plates shows us that Japan is not behind the western countries in scientific studies. Except a few cabalistic signs on the cover, and a few more on one page at the end of the article and a foot-note

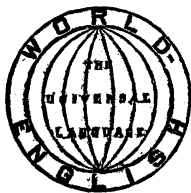
Reading Matter Notices.

Ripans Tabules: for torpid liver.
Ripans Tabules banish pain.

BACK NUMBERS and complete sets of leading Magazines. Rates low. AM. MAG. EXCHANGE.
Schoharie, N. Y.

RESTORE YOUR EYESIGHT

Cataracts, scars or films can be absorbed and paralyzed nerves restored, without the knife or risk. Diseased eyes or lids can be cured by our home treatment. "We prove it." Hundreds convinced. Our illustrated pamphlet, "Home Treatment for Eyes," free. Don't miss it. Everybody wants it. "THE EYE," Glens Falls, N.Y.



WORLD-ENGLISH.
25 Cents.
**HANDBOOK OF
WORLD-ENGLISH.**
25 Cents.

Ex-President Andrew D. White, of Cornell University, says: "I believe that the highest interests of Christian civilization and of humanity would be served by its adoption."

"So set down, our tongue is the best for the world to unite upon."—*Brooklyn Eagle*.

"The idea of Mr. Bell has much to recommend it, and the presentation is charmingly clear."—*American*, Phila.

"The result is a language which cannot fail to meet with acceptance."—*Boston Traveller*.

"World-English deserves the careful consideration of all serious scholars."—*Modern Language Notes*.

Sent, postpaid, on receipt of price.

N. D. C. HODGES,

874 Broadway, New York.

THE MODERN MALADY; or, Sufferers from 'Nerves.'

An introduction to public consideration, from a non-medical point of view, of a condition of ill-health which is increasingly prevalent in all ranks of society. In the first part of this work the author dwells on the errors in our mode of treating Neurasthenia, consequent on the wide ignorance of the subject which still prevails; in the second part, attention is drawn to the principal causes of the malady. The allegory forming the Introduction to Part I. gives a brief history of nervous exhaustion and the modes of treatment which have at various times been thought suitable to this most painful and trying disease.

By **CYRIL BENNETT.**

12°, 184 pp., \$1.50.

N. D. C. HODGES, 874 Broadway, N. Y.

THE RADIOMETER.

By **DANIEL S. TROY.**

This contains a discussion of the reasons for their action and of the phenomena presented in Crookes' tubes.

Price, postpaid, 50 cents.

N. D. C. HODGES, 874 Broadway, New York.

Pennsylvania Bedford Springs Mineral Water

For Liver, Kidney and Bladder Troubles.
For Gravel, Gall Stones, Jaundice.
For Dyspepsia, Rheumatism and Gout.
For Dropsy, Bright's Disease, Diabetes.
For Hemorrhoids, Etc.

It has been used medicinally and prescribed by physicians for nearly one hundred years.

DIRECTIONS:—Take one or two glasses about a half-hour before each meal.

Case One Dozen Half-Gallon Bottles, \$4.50.

Case Fifty Quarts (Aerated), \$7.50.

Bedford Mineral Springs Co., Bedford, Pa.
Philadelphia Office, 1004 Walnut St.

ESTERBROOK'S STEEL PENS.

OF SUPERIOR AND STANDARD QUALITY.

Leading Nos.: 048, 14, 130, 135, 239, 333

For Sale by all Stationers.

THE ESTERBROOK STEEL PEN CO.

Works: Camden, N. J. 26 John St., New York.



MINERALS.

**New Store.
New Stock.
New Departments.**

Send for our "Winter Bulletin," recently issued. Minerals, Gems, Microscopical Sections, Fine Lapidary Work.

GEO. L. ENGLISH & CO., Mineralogists,

Removed to 64 East 12th Street, New York.