

"direct fire." The author of the book, Capt. Ingalls of the First Regiment United States Artillery, instructor of ballistics at the United States Artillery School, has already given to the public two works on the same subject,—*"Exterior Ballistics,"* and *"Ballistic Machines."* This work was prepared while the author was engaged in teaching ballistics to student officers at the artillery school at Fort Monroe, and most of the examples are such as were given out from time to time to classes under his instruction, as exercises in ballistic formulæ. It will prove to be of permanent value, not only to the particular branch of the service for which it was intended, but also for other branches, both regular and militia. The most important of the examples may be worked out with a very slight knowledge of mathematics, arithmetic and a little algebra being sufficient for many of them.

AMONG THE PUBLISHERS.

IN *Lippincott's Magazine* for January, 1891, we note "The State of Washington," an article by Major Moses P. Handy, which will surprise the many who know little of this section of the country; and "The Road Movement," an article by Lewis M. Haupt, C.E., which contains some suggestions for the much-needed improvement of public roads.

—Messrs. Houghton, Mifflin, & Co. announce a new edition of Mr. Lowell's "Fable for Critics." This poem, in which all the prominent American authors of the period at which it was written are reviewed with keen appreciation mingled with good-natured banter, Mr. Lowell composed when he was under thirty years of age. "This *jeu d'esprit*," says Mr. Lowell in a prefatory note, "was extemporized, I may fairly say, so rapidly was it written, purely for my own amusement, and with no thought of publication. I sent daily instalments of it to a friend in New York, the late Charles F. Briggs. He urged me to let it be printed, and I at last consented to its anonymous publication. The secret was

kept till after several persons had laid claim to its authorship." There are twenty-six authors mentioned in the poem, and the publishers have made the book more interesting by securing portraits of each of these writers, taken about the time the original edition was published. These are reproduced in outline, and are inserted in the text at the point where each author is mentioned. A list of the authors alluded to is also given for the first time, so that the surmises to which the fable has always given rise will at last be set at rest.

—The first number of *The Bacteriological World*, edited by P. Paquin, M.D., Columbia, Mo., has appeared.

—A paper on the "Echinoderms from the Northern Coast of Yucatan and the Harbor of Vera Cruz," by J. E. Ives, assistant to the curator in charge of the Academy of Natural Sciences of Philadelphia, is published in the "Proceedings of the Academy of Natural Sciences of Philadelphia," Sept. 30, 1890. The *Echinodermata* which form the subject of this paper were collected on the northern coast of Yucatan and at Vera Cruz, in the spring of the present year, by an expedition from the Academy of Natural Sciences of Philadelphia to investigate the natural history of Yucatan and Mexico. The results in this department are interesting. One new genus and three new species are described, a little-known species is figured for the first time, the synonymy of this species and of some others has been studied with profitable results, and the majority of the species collected supply new localities which form connecting points between the northern and southern portions of the great West Indian, or eastern tropical American littoral fauna. The northern coast of Yucatan possesses a sandy beach largely made up of shell fragments. The water off the coast is very shallow, the ten-fathom line being twenty miles from the shore, and the hundred-fathom line about one hundred and fifty miles. Three miles off the shore in the neighborhood of Progreso, the bottom is of a sandy character, although

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