"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 ballastic 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 algrebra 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 [VOL. XVII. No. 413

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.

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

-A paper on the "Echinoderms from the Northern Coast of

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a few small corals were brought up in the dredge. Along the shore to the westward of Progreso is a small serpuloid reef.

- Messrs. Ginn & Co. announce as ready "Quintus Curtius," the first two extant books, edited for sight-reading by Dr. Harold N. Fowler of Phillips Exeter Academy, with an introduction on reading at sight by Professor James B. Greenough of Harvard College. This book has been preferred on account of the conviction of the editor that for practice in sight-reading some continuous prose narrative not readily accessible in a copiously annotated edition should be in the hands of the pupil. The notes of this edition are confined to translations of unusual or striking words and phrases, with occasional brief hints concerning syntax, the main object of which is to save time in the class-room. In the introduction, Professor Greenough shows by examples the method to be pursued in reading at sight, besides explaining fully his ideas on the subject.

-The twenty-fifth volume of the Magazine of American History is opened with the January number. The leading illustrated paper for the month, from the pen of the editor, is entitled, "John Ericsson, the Builder of the 'Monitor,' " and a portrait of the inventor forms the frontispiece. The second article following, "The Bladensburg Duelling-Ground," near Washington, written by Milton T. Adkins, is also illustrated. The Georgia historian, Col. Charles C. Jones, jun., contributes a paper on "Dr. Lyman Hall, Governor of Georgia in 1783, and Signer of the Declara-tion of Independence;" Hon. Charles Aldrich of Iowa writes of the eloquence of Andrew Johnson; Hon. James Phinney Baxter, president of the Maine Historical Society, contributes "Isaac Jogues, A.D. 1636," a poem; Orrin B. Hallam gives the reader a history of the original treasury accounting office; and we have the first part of "Count de Fersen's Private Letters to his Father, 1780-1781," which are the observations and opinions of an officer under Rochambeau in the French Army during the Revolutionary

war, translated from the French by Miss Georgine Holmes. Among the Shorter papers, "The United States Flag," by J. Madison Drake, and "Capital Punishment in 1749," by Bauman L. Belden, are interesting.

-The Monist for January, 1891, a philosophical quarterly published by The Open Court Publishing Company, Chicago, contains "The Architecture of Theories," by Charles S. Peirce; "Illustrative Studies in Criminal Anthropology," by Professor Cesare Lombroso; "The Squaring of the Circle, the History of the Problem from the most Ancient Times to the Present Day," by Hermann Schubert; "The Criterion of Truth, a Dissertation on the Method of Verification," by Dr. Paul Carus; "Five Souls with but a Single Thought: the Psychology of the Star-Fish," by Carus Sterne; "German Philosophy in the Nineteenth Century," by Professor Friedrich Jodl; "Recent French Philosophical Works," by Lucien Arréat; book-reviews; and contents of the philosophical periodicals of America and Europe.

-"The fancy took me to go to Noto," says Mr. Percival Lowell, in his paper on "Noto: An Unexplored Corner of Japan;" and where Noto is, and how he went there, is not only the subject of the opening article in the January Atlantic, but is to be the subject of several articles which are to follow. Cleveland Abbe's paper, which will command attention, suggests a new university course, this course to be devoted to terrestrial physics as a distinct department of instruction. Mr. Charles Worcester Clark writes about compulsory arbitration, in which he says that one of the most striking features of our easy-going American character is ready submission to the domination of our servants, whether it be Bridget in our kitchen, the railway in our streets, or Congress in the Capitol at Washington. Professor Royce has a long paper on Hegel, Adolphe Cohn writes about Boulangism, and Mr. Henry Charles Lea indicates the lesson of the Pennsylvania election.

