handy in form and weight, and, in our opinion, will be found useful to all engineers engaged, or likely to be engaged, in any kind of hydraulic work.

## AMONG THE PUBLISHERS.

OF the International Education Series published by the Appletons more than twenty volumes have now been issued, one of the latest of which is "Rousseau's Emile," abridged, translated, and annotated by William H. Payne of the University of Nashville. It is not a mere series of extracts, but a judicious condensation, forming a continuous work and giving as much of the original as readers of our time are likely to care for. The important and wide-reaching influence of Rousseau's work has been due in the main to his perception of the grand truth, previously too little regarded, that the child's faculties have a certain natural course of development, and that, if education is to be successful, it must be in harmony with that development. Unfortunately, he knew but little of what that course of development really is, and his practical plans for meeting it were about as inappropriate as they well could have been; and whoever should adopt them would find in the end, if not sooner, that he had followed anything but nature. Rousseau's notions that the child ought not to do anything against his will, that children have and can have no morality, and that all wickedness is weakness, are both false and mischievous; and many others of like character might be cited. Moreover, though a vehement democrat in politics, he would refuse the benefit of education to the poor, expressly saying that "the poor man has no need of an education," and he held that women ought to be educated merely to please men. Mr. Payne is clearly conscious of these faults in Rousseau's work, and sharply animadverts on some of them in the short but very suggestive notes that he has furnished to this volume. Moreover, he does not hesitate to attack some of the educational fads of the time; and his comments add much to the value of the book. Indeed, we think the public would be glad to receive from him an independent work of his own, in which his views might be stated more at large.

- Charles Scribner's Sons have in preparation "How to Know the Wild Flowers," by Mrs. William Starr Dana, with 100 illustration by Marion Satterlee.

- The latest issue in Scribner's series on the Great Educators treats of "Froebel and Education by Self-activity." The author is an Englishman, Mr. H. Courthope Bowen, who is an enthusiastic disciple of Froebel, and has had much practical experience of kindergarten work. We cannot say, however, that his book is a quite satisfactory treatment of its theme, the literary form of it being in some respects defective. There is a good deal of repetition in it, as indeed the author himself admits, and the sentences are often loaded down with parenthetic expressions which make them awkward and sometimes obscure. The first two chapters relate the principal events of Froebel's life, the processes of his own education and his various experiences and experiments as a teacher. Then follows a notice of his philosophy, which, however, Mr. Bowen makes no more intelligible than others have done, and then an exposition of his theory of education. The remainder of the book is devoted to a description of the kindergarten and other contrivances that Froebel designed, with some account of his relation to earlier and later educators. thus giving on the whole as full an exposition of his views and methods as most teachers will desire. As to the value of those methods themselves, we have not space to speak largely; but we cannot help thinking that both Froebel and Pestalozzi are at the present day greatly overrated. Their methods are only adapted to a few years of early childhood, and are not perfect even for that period; while their prejudice against book-learning was little short of barbarous. Nevertheless, whatever is good in their systems we want, and we trust that our teachers will not fail to appropriate it.

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For sale, or for exchange for books on medicine or surgery, new editions only, a large geological library, containing nearly all the State and Government Reports since 1855. Will be pleased to answer letters of inquiry and give information. Address R. ELLSWORTH CALL, Louisville, Ky.

For exchange.—Slides of Indian Territory Loup Fork Tertiary Diatoms for other microscopic fossils. Address S. W. WILLISTON, Univ. of Kansas, Lawrence, Kans.

For exchange.—Will exchange an "Ideal" Mi croscope of R and J. Beck, London, 2 eye pieces 3 objectives, 3 inch, 1 inch, 1-6 inch; bull's eye con denser on stand, substage condenser, mechanica stage, etc., for any of the leading makes of type writers. Particulars by mail. DELOS FALL, Albion College, Albion, Mich.

Sale, or exchange for similar material; Diatoms (Isthmia nervosa), unmounted, from San Francisco Bay. M. J. ELROD, Bloomington, Ill.

For sale or exchange. — I have a few copies of my translation of "Strasburger's Manual of Vegetable Histology, 1887," now out of print, which I will send post-paid for \$3 or for one dozen good slides illustrating plant or animal structure. Address A. B. Hervey, St. Lawrence University, Canton, N. Y.

The undersigned has the following specimens to exchange for crystals of any eastern or foreign localities or Indian relics: tin ore, metacinnabarite, stibnite, garnierite, calenanite, hanksite, ulexite, rubellite, lepidolite, blue and green onyx, Cal. pineite, aragonite on chalcedony, cinnabar, double refracting spar, clear and clouded, and others. J. R. Bush, care of General Delivery, Los Angeles, Cal.

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