the family and usually the genera of any of our northern birds."

As it attempts to trace them all to the species. I think the notice should say so, and, if it is a failure in that attempt, say that also, and not lead readers to think I would write a book to enable a hunter to find out merely that the bird he shot is a snipe rather than a duck.

AUSTIN C. APGAR.

Trenton, N. J., Dec. 27, 180.

BOOK-REVIEWS.

The Science of Education, Its General Principles Deduced from Its Aim, and The Aesthetic Revelation of the World. By JOHANN FRIEDRICH HEBART. Translated from the German with a Biographical Introduction by Henry M. and Emmie Felkin and a Preface by Oscar Browning, M. A. Boston, D. C. Heath & Co. 268 p., 1893.

PROBABLY no feature of our intellectual culture and of our advancement in higher education is so significant as the growing library of pedagogics in this country. For a number of years this department of thought has been sadly neglected with us, while abroad it has long received due attention as a most important factor in philosophic progress. Particularly with the German thinkers has this subject proved most fruitful, but, unfortunately, the peculiar difficulties of philosophical German have limited the English-speaking readers of these works to a favored few who, maybe, from residence abroad have acquired that thorough knowledge of the language necessary. Mr. and Mrs. Felkin have certainly then earned the applause of all teachers and thinkers by their careful and conscientious translation of these most valuable works of Hebart. Hebart himself is known by little more than name in this country, though some may recall him as a former professor at Göttingen, whose works on psychology and education are of great value; and yet as a metaphysician, psychologist, philosopher and teacher few men are deserving of so much careful study.

In the introduction to the present work we have a

Vol. XXII. No. 569

charming biographical sketch of the author, revealing in its carefully selected details glimpses of the inner man and offering a series of pen pictures of great value and assistance to the proper appreciation of the discussion which follows. Through his childhood, at Jena, at Bremen, at Göttingen, at Königsberg, we follow the author in his development, if development it can be called, when from their inception his theories seem to be those of mature growth and profound contemplation. Following this entertaining sketch the translators have given a review of Hebart's philosophy, together with a synopsis of the two works which follow and form the principal portion of the book. The review has evidently been written from a thorough acquaintance with Hebart's writings and is an additional aid to our understanding of his principles. "The whole aim of education, according to Hebart, is contained in the one word, morality. Its whole work is to form a character which in the battle of life shall stand unmoved, not through the strength of its intermal action, but on the firm and enduring foundation of its moral insight and enlightened will." "Proceeding from morality as the highest aim of humanity, and consequently of education, the essence of formation of character is defined as 'a making' which the pupil himself discovers when choosing the good and rejecting the bad. This rise in self-conscious personality must take place in the mind of the pupil himself, and be perfected by his own exertion. To place the power already existent, and in its nature trustworthy, in the midst of such conditions that it must infallibly effect this rise, is what the teacher must conceive as possible-while he must consider the great work of all his efforts is to reach, understand and guide that power."

- Industrié des Cuirs et des Peaux, Analyse des Matières Premières, des Agents Auxiliaries et des Products. Par FERDINAND JEAN. Paris, Gauthier-Villars et Fils. 195 p., 1893.
- Fabrication des Vernis, Application à l'Industrié et aux Par LAURENT NAUDIN. Paris, Gauthier-Villars et Arts. Fils. 200 p., 1893.

Piso's Remedy for Catarrh is the Best, Easiest to Use, and Cheapest. Every reader of "Science" should sub-SOFTLY STEALS THE LIGHT OF DAY wher filtered through windows covered with scribe for the CATARRH CRYSTOGRAPHS, AMERICAN ARCHITECT, Sold by Druggists or sent by mail. 50c. E. T. Hazeltine, Warren, Pa. a substitute for Stained Glass that is inexpensive, beautiful, and easily applied. THE OLDEST AND BEST Architectural publication in the country. Interesting articles on architecture, Sani-tation, Archæology, Decoration, etc., by the ablest writers. *Richly illustrated*. Issued weekly. Send stamp for specimen copy to the publishers, 20c. per square foot. Samples and catalogue, 10c. CRYSTOGRAPH CO., ABOUT 📀 LANTER 816 North Broad St., Philadelphia. BRENTANO'S. US WE MAKE THEM Publishers, Importers, Booksellers. Ticknor & Co., 211 Tremont St., Boston. & CO. We make a specialty of technical works in all branches of science, and in all languages. Subscriptions taken for all American and foreign scientific periodicals. Our Paris and London branches enable us to im-port at shortest notice and lowest prices. REPORTS OF SCIENTIFIC SOCIETIES, MONOGRAPHS, GOVERNMENT REFORTS, etc. Correspondence solicited. COLT 12 16 BEEKMAN ST. 189 NEW YORK CHICAGO.IL THE CHEAPEST AND BEST ! HOTO ENGRAVING (@ 1893 Catalogue BUILDING 67 PARK PLACE, NEW YORK From us. SEND FOR A SAMPLE COPY OF BOOK CHAT. A Month-ly Index of the Periodical Literature of the World. \$1.00 per year. of Books on Building, Painting, and Decorating, also Catalogue of Draw-ing Instruments and Ma terials, sent free on appli-cation to BOOKS. ENGRAVING FOR ALL ILLUSTRATIVE AND BRENTANO'S, Union Square, New York, DRAWING Chicago, Washington, London, Paris. Pennsylvania Bedford Springs Mineral Water Wm. T. Comstock, INSTRUMENTS. For Liver, Kidney and B dder Troubles. For Gravel, Gall Stones, Jaundice. For Orsvel, 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 balf-hour before each meal. Case One Dozen Half-Gallon Bottles, \$4.50. Case Fifty Quarts (Aerated), \$7.50. Bedford Mineral Springs Co., Bedfurd, Pa. 23 Warren St.; New York. SCIENCE CLUBBING RATES. 10% DISCOUNT. TEN BOOKS FOR PRICE OF ONE SEND FOR A CATALOGUE OF SEND FOR A CATALOGUE OF THE HUMBOLDT LIBRARY OF SCIENCE. Containing the works of the foremost scientific writers of the age.—The Great Classics of Modern Thought.—Strong meat for them that are of full age. Single numbers 15 cents. Double numbers 30 cents. Address:—THE HUMBOLDT PUBLISHING CO., 19 Astor Place, New York. We will allow the above discount to any subscriber to Science who will send us an order for periodicals exceeding \$10, counting each at its full price. Bedford Mineral Springs Co., Budfurd, Pa. Philadelphia Office, 1004 Walnut St.

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