Science. 239

on the part of the author. The introductory chapters contain a statecort of the principles underlying the work in Nature study, and they also point out the mistakes of the past, so that these may be avoided for the future. The remainder of the book is made up of type lessons from every department of Nature. These, however, are not intended as anything more than types. the materials employed in these lessons are not available, then other material that are at hand may be substituted, and the principles of these lessons applied in the study of it.

This work is the first of the kind, as far as the writer knows, by a Canadian author, and is of very high merit. It avoids the superficialty too often found in works pretending to deal with this subject, while it gives an excellent statement of the principles applicable in Nature study, and outlines course that is comprehensive enough to meet the requirements of our schools. Whatever excuse there may have been in the past for the employment of imperfect methods in Nature study is, to a large extent, removed by this book, and it is to be hoped that it will meet with the appreciation its merits demand.

A School Chemistry. By Dr. John Waddell, Queen's University. The MacMillan Co., London and New York; George N. Morang, Toronto.

The aim of this text-book is

stated by the author in his preface to be "to help the pupil in the discovery of new facts, to enable him to see their connections, and to show how facts lead to theory, and theory aids in investigation and in the discovery of further facts. The subject is presented in what seems to me the correct prospective, theory being subordinated to fact. The author has, throughout the book, closely adhered to the task he has set himself, and if the experiments described are carefully performed and the questions in conection with each conscientiously answered from the results of the experiments, the student will have obtained a good grasp of the elementary principles of chemistry. The object of a course in elementary chemistry should be rather to acquaint the student with the processes of the subject, and thus give him the ability to go on with the work he has undertaken than to load his mind with a mass of facts substances with regard to the treated. This the author seems to have had constantly before him in preparing the text. It is just possible too much is suggested to the student by the questions that are asked in connection with each experiment.

The latest ideas on this difficult subject suitable to an elementary course are embodied in this work. The preface is especially valuable on account of the statement of pedagogic principles contained in

it