tions and systematic qualitative analysis, with a few carefully chosen quantitative experiments afford the best background for the theoretical development of the science." They have, in order to avoid superficiality, cut the number of experiments down to a minimum, necessary for the understanding of the subject in its elementary phases. They have given more experiments than can be done in the normal year's work in school or college, hoping to stimulate the ambitious student to further work.

They have selected 33 typical experiments which includes the preparation of the common gases and acids and the preparation of several salts. This is followed by a study of the typical reactions of the metals and a course in qualitative analysis. The book also contains a few pages devoted to the quantitative proof of some of the fundamental laws upon which the science of chemistry is based. The material given is well selected and clearly stated, though, as the authors state in the preface, they have introduced little that is new. The question that each teacher must solve is whether it is better to cover a limited field thoroughly or to cover a broad field by selected examples. If a student's knowledge of chemistry is to be gained by one year's work this book could be used no doubt to advantage in connection with a text-book and a course of lectures; but if the subject is to be pursued further each one of the separate fields covered here would have to be gone over again in greater detail in order to attain a suitable ground for more advanced work.

J. E. G.

A Naturalist in the Bahamas. By John I. Northrop. October 12, 1861–June 25, 1891. A memorial volume edited with a biographical introduction by Henry Fairfield Osborn. New York, The Macmillan Co. $2.50.

The present volume brings together the papers of the late Dr. John I. Northrop, describing the zoological, botanical and geological results of his six months' collecting on the Bahama Islands. It includes also a narrative of the expedition contributed by Mrs. Northrop; a report upon the Bahaman crustaceans by Professor William H. Rankin; on the actinians, by Professor J. Playfair McMurrich; on the shells by Professor William H. Dall; on plants by Mrs. Northrop, Mr. Frank S. Collins and Dr. O. F. Cook; and a paper describing the new oriole *Icterus northropi,* by Dr. J. A. Allen. All of these papers are carefully republished and the volume forms altogether a substantial contribution to American zoological literature. . . . One closes the book with the feeling of keen regret that the life of Dr. Northrop could not have been spared. If his early promise brought together both from his own pen and from those of his associates the present results, what may not his years of maturity have contributed? He was another Lycidas and zoologists will remember him with such men as Harrington, Budgett and Balfour.

Bashford Dean

THREE FORMICID NAMES WHICH HAVE BEEN OVERLOOKED

Mr. S. A. Rohwer has kindly called my attention to two generic names which have been overlooked by all recent myrmecologists, including Dalla Torre, the author of the "Catalogus Hymenopterorum." One of these names is *Typhlomyrmex,* which was given by Gistel in 1856[1] to *Myrmica typhlops* Lund. On referring to Lund's paper[2] I find that *M. typhlops* is mentioned without a description, and since the insect is certainly not a *Myrmica* in the modern sense and can not be identified from the few notes on its habits (moving in files and carrying isopods), the name must be regarded as a *nomen nudum* and hence without any standing in nomenclature. And since Gistel cites no characters for his genus *Typhlomyrmex* but merely bases it on an invalid name, it, too, is without standing. Mayr, without knowing of Gistel's work, described in 1862 a genus *Typhlomyrmex* for a neotropical ant, *T. rogenhoferi*

[1] "Mysterien der europäischen Insectenwelt."

[2] "Lettre sur les Habitudes de Quelques Fourmis du Brésil, addressée a M. Audouin," *Ann. Sci. Nat.*, XXIII., 1831, p. 113–138.