

Government botanist for Western Australia, has written brief annotations to the pictures, all of which are good representations of the species they portray. The book should help to stimulate interest in the unique flora of Western Australia. It would make a charming small gift for any plant lover, whether botanist or layman.

R. MELVILLE

#### Amber Spiders in European Collections

By Alexander Petrunkevitch. (*Transactions of the Connecticut Academy of Arts and Sciences*, Vol. 41, July, 1958.) Pp. 97-400. (New Haven, Conn.: Connecticut Academy of Arts and Sciences; Copenhagen: Ejnar Munksgaard, Ltd., 1958.) 7 dollars.

**I**N this substantial monograph Prof. Petrunkevitch continues his study of amber spiders with an examination of 230 Baltic specimens, chiefly from collections in France, Germany and Denmark. Forty-seven new species are described, two of them belonging to families, Oxyopidae and Hahniidae, previously unknown in amber. The paper is illustrated by 591 text-figures, and the author gives reasons for preferring line diagrams to photographs: in this respect alone do his methods differ from those of former years. He emphasizes the great importance of labelling every piece of amber containing an arthropod with all the relevant data. The paper includes a list of all known amber spiders, of which 160 species are recognized and which belong to 27 existing and 6 extinct families.

T. H. SAVORY

#### The Chemistry of Borates

Part I. A Review by Peter H. Kemp. Pp. viii+90. (London: Borax Consolidated, Ltd., 1956.) 12s. 6d.

**T**HIS monograph is a valuable compilation of chemical and physical data on boron oxides, boric acid, and the borates of the alkali metals and of ammonium, calcium and magnesium. Five pages give the essential background on the element itself, and eight pages deal with the perborates, in which the author believes that there is no adequate evidence for hydrogen peroxide of crystallization.

Data in certain cases include enthalpy, entropy and free energy of formation, specific gravity, solubility, melting points, phase-rule diagrams, crystalline form, X-ray measurements, acidity constants and conductivity. Also, there are useful discussions on complexes with organic compounds and on aqueous solutions of the alkali borates.

The literature seems to have been conscientiously searched up to 1955. The book is well printed and no errors have been detected.

A. D. MITCHELL

#### Spot Tests in Inorganic Analysis

By Prof. Fritz Feigl. Fifth, enlarged and revised English edition. Translated by Prof. Ralph E. Oesper. Pp. xiii+600. (Amsterdam: Elsevier Publishing Company; London: Cleaver-Hume Press, Ltd.; Princeton, N.J.: D. Van Nostrand Company, Inc., 1958.) 65s.

**T**HIS, the fifth edition of Prof. Feigl's well-known work, is a companion volume to "Spot Tests in Organic Analysis", and now appears as a book in its own right. Improvements and additions are reflected in an increase of the number of pages from 518 to 600.

The chapter by Prof. P. W. West on "Spot Test Techniques" now contains a description of the ring oven method of Weisz, which has been used for the separation of as many as 14 ionic species in a single

drop of solution. Other additions include sections on cyanic, hypohalogenous, perchloric, and hyposulphurous acids, and on free aluminium, lead, zinc, tin, arsenic, molybdenum, vanadium, dicyanogen, and tellurium. Some of the twenty-five additional sections in the chapter dealing with the applications of spot reactions are concerned with, as examples, the detection of arsenic, manganese, nickel, titanium, and chlorine in minerals and rocks, the differentiation of calcite from dolomite, the differentiation of minerals containing barium and strontium, the detection of ammonium salts in filter papers, and the detection of iodine in mineral and sea water.

The book is now established as a standard work: due attention is paid to the chemistry of the tests and to the possibility of interferences. Perhaps, for the benefit of the inexpert, greater emphasis might have been placed on some parts of Chapter 1, for example, by italicizing the sentence on p. 14 which reads, "All experience shows that there are but few absolutely reliable and non-misleading tests".

C. O. HARVEY

#### Abstracts of Papers

Given in the Session on Radiation Chemistry at the All-Union Conference on the Application of Radioactive and Stable Isotopes and Radiation in the National Economy and Science, held in Moscow, March 25-April 2, 1957. Translated from the Russian. Pp. 47. (New York: Consultants Bureau, Inc., 1957.) 10 dollars.

**T**HIS volume contains English translations of abstracts of papers given in the session on radiation chemistry at the conference on the application of radioactive and stable isotopes and radiation in the national economy and science held in Moscow in the spring of 1957. Fifty-five papers are abstracted, about 400 words being devoted to each. Nearly all aspects of radiation chemistry are represented, including the gas phase, aqueous and organic systems, polymers and metal corrosion, and there are several papers on special apparatus and techniques. The translations are excellent.

G. PORTER

#### Symposium on Radiation Chemistry

Academy of Sciences of the USSR, Division of Chemical Science, Moscow, 1955. Edited by Prof. N. A. Bakh. Translated from the Russian. Pp. 223. (New York: Consultants Bureau, Inc., 1956.) 100 dollars.

**T**HIS volume contains full translations of twenty-seven papers presented at the Moscow Symposium on Radiation Chemistry. In her preface Prof. Bakh says: "The symposium as a whole presents a picture of the modern development of various aspects of radiation chemistry in our country".

It is divided into two parts dealing, respectively, with transformations in aqueous systems and with transformations in organic substances. The first part contains investigations of the radiolysis of water, oxidation-reduction processes in inorganic salt solutions, sensitization and protection processes, the action of radiations on colloidal solutions, and a paper on radiolysis of liquid oxygen. The second part includes papers on the radiolytic oxidation of organic compounds, radiation polymerization, the actions of radiations on polymers and mass spectrometry.

The authors include P. I. Dolin, V. I. Veselovsky, the late N. B. Miller, N. A. Bakh, M. A. Proskurnin