

and attractive outline of the present state of chemical knowledge of a standard suitable for the highest forms of schools or for university students who are beginning the study of chemistry. There is, however, one passage in an introductory discussion of the transformations of energy which cannot be allowed to pass unnoticed. It is stated (p. 32): "So, with a conductor like the filament in the lamp, unless it offers resistance to the current and destroys a sufficient amount of electricity" (the italics are ours) "it gives out neither light nor heat." It is to be hoped that this will be amended in a later edition.

(2) "Experimental Inorganic Chemistry" is a laboratory companion to the text-book discussed above. It contains directions for carrying out a large number of experiments of various types, including illustrations of chemical laws, the preparation of substances and examination of their properties, some qualitative analyses, and simple experiments in physical chemistry. The instructions are very clear and precise and seem well designed to lead students to work thoughtfully. In a few cases, however, the methods given for carrying out the experiments appear a little crude for the class of students that would be capable of using the companion text-book intelligently.

(3) "Laboratory Outline of College Chemistry" is almost identical, word for word, with the last-mentioned work (2). There are, however, differences of arrangement, and in the order in which subjects are treated, which render it more suitable for use with the author's "General Chemistry for Colleges." It contains a short chapter, which is not included in "Experimental Inorganic Chemistry," on Bunsen's film and match tests. This is a welcome feature, for it is to be wished that these tests, on account of their elegance and of the training in manipulation which they afford, were taught more frequently than is at present the case.

W. H. M.

#### OUR BOOKSHELF.

*Homeland: A Year of Country Days.* By Percy W. D. Izzard. With illustrations by Florence L. Izzard and W. Gordon Mein. Pp. 383. (London: John Richmond, n.d.) Price 7s. 6d. net.

THIS book consists of a series of sketches—mostly impressionist—of the march of the seasons in the Eastern Counties of England. There is one for each day in the year, and the author shows his good sense by beginning with March 21 and ending with March 20. "So we set out in the thrill of the year's morning songs and climb with the sun to the high noon of summer; then go down the hill of autumn and traverse the valley of winter, and so arrive again before the portals of spring. Thus hope is with us first and last." And delight as well, we may say, for Mr. Izzard's

pictures—many of them just vignettes—have a delicate touch, awakening old joys. On reading them we feel that the author is one who would sincerely say with Stevenson:—

To make this earth our hermitage,  
A cheerful and a changeful page,  
God's bright and intricate device  
Of days and seasons doth suffice.

Let us mention a few titles: "Laggard Spring," "Snow and Kingfishers," "The Elms in Bloom," "Wine of Spring," "Bluebells," "The Top of the Morning," "The Honey Way," "Bees in the Broom," "A Yellow Wagtail," "A Summer Shower," "Scented Night," "Grass of the Dunes," "Ageing Leaves," "Spider-Craft," "Rain on the Wheat," "Autumn Colour," "A Pimpernel Morning," "Winter Sleeps." These are not informative essays, be it understood, but dainty bits of impressionism, pleasant to read for a few minutes in the morning, and rejoicing the heart. The book has some beautiful black-and-white illustrations by Florence L. Izzard and W. Gordon Mein, and it is very pleasantly printed with a page for each day. We recommend it heartily to those who have "a love of the country."

*The Portal of Evolution: Being a Glance through the Open Portal of Evolution at Some of the Mysteries of Nature.* By a Fellow of the Geological and Zoological Societies. Rp. 295 + ii. (London: Heath, Cranton, Ltd., 1918.) Price 16s. net.

THE author of this book begins chap. i. with the words: "My aim in writing this treatise has been to avoid making it in any way a scientific work." We are bound to say that he has succeeded. For what we opened with the eager hope of getting some fresh light on the factual problems of evolution turns out to be a sheer eccentricity. It is a serious but futile elaboration of extravagant hypotheses about the intermarrying of the diverse attributes of the Trinity. It is a preposterous attempt to illumine facts by fictions and to talk two languages at once. Of the author's scientific incompetence a glimpse is given in a statement in the first chapter: "Embryology has established beyond dispute that in the early stages of our conception within our mother's womb we again assume the types of worms, fishes, animals, and in some cases of plants that did their part in evolving our present existence." But a glimpse of something worse is given in the fundamental statement: "The intermarrying of the attributes of God's personalities has indeed placed in my hands a key that would, in time, with thought and study, enable mankind to unlock the door and enter the portal of Evolution, and ultimately to be able to understand divine revelations. . . ." We do not wish to be too hard upon a treatise so obviously serious and well-intentioned, especially as we are assured that "it is only during the last one hundred years that the property of understanding has dawned upon man," but we cannot help feeling that there has been a sad waste of paper here.