

added much to its value. Of these the chapter on alloys may be mentioned as a particularly successful piece of exposition.

The book reflects as much as ever the spirit of a very true believer in the ionic dissociation hypothesis, and little emphasis is given to the difficulties and objections or to the criticism by which it has been assailed. Although in an elementary work an author can scarcely be expected to go into great detail, it must be remembered that the English student still finds himself in an atmosphere where there is a good deal of objurgation about the ionic theory, and if Prof. Walker had dealt with the difficulties collectively it would probably have been a convenience to students.

The following points have been noted for remark in the course of reading. On p. 83 the wording may readily give the impression that the vapour rising from a boiling salt solution has a temperature of 100° C., a matter on which there is a widely prevalent misconception among students. On p. 227 it would have been well to explain why the Brownian movement is compatible with the conventional assumption that a body suspended in a liquid is subject to equal pressure in every direction. The explanation of "salting out," on p. 347, as a process depending *solely* on ionic concentration is scarcely justifiable. Lastly, Prof. Walker has used throughout the book his system of chloridion, sulphation sodion, &c., nomenclature. The present writer took exception privately to this nomenclature when it was first proposed, but was assured that with experience he would learn its value to students. This prediction has not been fulfilled, and whatever philosophical defence may be made of the system, he remains of the opinion that it is not helpful. A. S.

BRITAIN'S BIRDS.

Britain's Birds and their Nests. Described by A. Landsborough Thomson, with introduction by Prof. J. A. Thomson. 132 drawings in colour by G. Rankin. Pp. xxviii+340. (London: W. and R. Chambers, Ltd., 1910.)

ANOTHER gorgeous volume on Britain's birds and their nests! Truly of the making of books on this subject there seems no end. Happy the publishers, and authors we presume, supported by a public with so insatiable an appetite for British ornithology. We could exhaust the space at our disposal with a mere list of the books and serials on this subject which are issuing or have issued from the press within the past two years and have come under notice in these pages. The name on the title-page of a gifted professor in a great northern university, as introducer of his son as author has given special zest to the perusal of this particular volume.

Prof. Arthur Thomson writes an introduction to "Mr. Rankin's beautiful pictures and my son's text." We must, much to our regret, however, confess to considerable disappointment in the volume before us. The text is excellent. Indeed, the various biographies are pleasantly written, and very accurate as a whole, but little really appears to have been left for Mr. Landsborough Thomson to say that has not already been often told.

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But it is with the plates that fault is chiefly to be found. They are all "very pretty," but we have more of art than of nature in them. We suspect that they are mostly studio pictures rather than out-of-door studies. Without exception the species Mr. Rankin has depicted are the most "proper" series of British birds we have ever made the acquaintance of. They never foul the ground, when 'tis their nature to; they never disturb a blade of grass or a single petal of the beautiful flowers that emborder their nests in nearly every case. They are indeed the most æsthetic company we have yet met with, in the choice of nesting sites.

We miss, too, in many of the plates, the characteristic attitude of the bird represented. There is something lacking in the pose of the herring gull to those familiar with it "in the open." In the thick-knee the beak is too thin and its eye too small; in the corn-crake the true ralline attitude has not been caught. We failed to recognise the nidifugous nestling figured on plate 88, Fig. 3, as a young partridge until we had consulted the reference.

As to the eggs figured, it would be quite impossible for even one well acquainted with them in many cases to determine their parentage from the plates. Their size—no dimensions being given in the text—is also quite undeterminable, and their colour often far from true to nature. There is no doubt that as regards tint the three-colour process is very often to blame; but where it fails some indication should be given in the text.

The author, yet a very young man, shows by this ambitious venture into the world of books that he is possessed of "the passion of the ornithologist," and by it gives promise that we may expect from him an ornithological work "going far beyond the recording of occurrences," to quote his father's words, "and the observations of movements important and indispensable as these and similar inquiries are."

OUR BOOK SHELF.

An Introduction to Experimental Psychology. By Dr. C. S. Myers. (The Cambridge Manuals of Science and Literature.) Pp. vii+156. (Cambridge: University Press, 1911.) Price 1s. net.

IN this little book Dr. Myers gives a very interesting account of modern views in certain parts of the science of experimental psychology. The topics selected for discussion, and forming the headlines of successive chapters, are:—"Touch, Temperature, and Pain," "Colour Vision," "The Müller-Lyer Illusion," "Experimental Æsthetics," "Memory," and "Mental Tests and their Uses" (two chapters). On each of these subjects much important work has been done within quite recent years, and the exceptionally clear way in which the author sums up the latest results and brings out their theoretical importance will make the book of great value to physicians, educationists, and others who are finding a knowledge of the general methods and results of the science an indispensable supplement to their ordinarily-recognised intellectual equipment.

The first chapter contains a full account of the recent researches of Drs. Rivers and Head on human nerve division, which have modified so extensively our views on tactile sensibility. The chapter on the Müller-