pride, the course may be commenced anywhere, and it will always lead to a study of all science. The only danger the author sees is that the teacher may specialise in some particular part that he likes and knows something about; unless this temptation is resisted the course ceases to be general. In order that the pupil should be kept up-to-date, he must be urged to get the "bulletin habit," and to obtain as fast as they appear the very numerous publications of the Department of Agriculture.

Reaction was bound to set in sooner or later against the specialisation that has of late years characterised science teaching in many schools, and the book before us is one of the fruits of this reaction. Whilst we do not think that the author has found the final solution of the difficulties connected with the problem, we distinctly like his plan of utilising the experience of the child for all it is worth in the science course.

OUR BOOKSHELF.

South African Zoology. A Text Book for the use of Students, Teachers, and Others in South Africa. By Prof. J. D. F. Gilchrist. Pp. xi+323. (Cape Town and Pretoria: T. Maskew Miller. Pietermaritzburg and Durban: P. Davis & Sons, n.d.) Price 10*s.* 6*d.* net

THE object of this book, as stated in the preface, is "to give illustrations of the South African fauna with special reference to the more familiar forms, for the benefit of students of nature study, as well as the agriculturalist." Dr. Gilchrist, therefore, has a fine opportunity of replacing the hackneyed examples that have done duty so long in zoological teaching by Ethiopian types. In this, however, the book is disappointing. The European *Rana temporaria, Hydra, Bougainvillea, Aurelia,* the liver-fluke, the beef tapeworm, the common *Lumbricus terrestris,* the cockroach, the snail *Helix aspersa,* the dogfish, rabbit, and pigeon are once again employed for descriptive purposes.

It is a more pleasing task to point out the share devoted to African animals in this work. The section upon insects is in this respect the best in the book, the accounts of the locusts, termites, and ants being particularly interesting. The ticks are briefly considered, but the spiders are summarily dismissed. An African crawfish, Palinurus, is described as an introduction to the Crustacea. The life-histories of certain African parasitic Protozoa are also given. The African vertebrates, however, are only briefly referred to; the antelopes, for example, are not described, though their distribution is given. Incidentally, a number of interesting points are mentioned, *e.g.*, the use of the ascidian Polycarpa as a bait in seafishing, the habits of the rain-frog in burrowing into the nests of ants and termites, and the almost entire absence of eels from the westerly-flowing rivers.

More bionomical information would have been valuable. For example, we are not told anything about the habits of African Annelids, whereas the introduced forms are referred to at some length. Dr. Gilchrist's experience as an officer of the South African Fisheries investigations must have made the marine fauna of the Cape very familiar to him, but we are unable to form any picture of the common objects of the Cape shores. The book has been carefully revised, but the irritating forms "Rhodent" and "Rhodentia" are surely an oversight. An excellent index has been compiled for this work, which is illustrated throughout.

Physiology. By Prof. W. D. Halliburton, F.R.S. (Dent's Scientific Primers. Edited by Dr. J. Reynolds Green, F.R.S.) Pp. xi+176. (London: J. M. Dent and Sons, Ltd., n.d.) Price 1*s.* net.

IN this volume Prof. W. D. Halliburton "aims at presenting the main facts of modern physiology in an elementary way and in language as free from technical terms as possible." In a sense, he has succeeded in this aim. The facts are nearly all there, crowded into 167 pages of excellent and not very small type, with many illustrations, and the language is not obtrusively technical but has an appearance of simplicity. Technical language, however, is a species of shorthand, and in compressing into so small a space without its aid all that Prof. Halliburton considers main facts, there is an inevitable loss of real intelligibility. Without some rigorous selection a book of this size tends to become a succession of statements hardly assimilable by a mind not previously acquainted with the subject, and so of little educational value. Yet the work is obviously intended for students extremely junior, not so much in age as in knowledge. It is not, indeed, quite obvious what public the author seeks to reach, but perhaps we may be guided by such remarks as those on the "need for diligent use of the tooth-brush, . . . tooth-powders are not to be recommended," and "it is hardly necessary for me to preach to readers the necessity for temperance in the use of alcohol." The complete absence of any reference to the reproductive system of either sex—a remarkable omission in a scientific primer on physiology—may perhaps be also taken as an indication that here we have "popular" science of a familiar kind.

Colour-Music. The Art of Mobile Colour. By Prof. A. Wallace Rimington. Prefatory Notes by Sir Hubert von Herkomer, M.V.O., and Dr. W. Brown. Pp. xx+185. (London: Hutchinson and Co., 1911.) Price 6*s.*

IT is difficult to give a fair impression of the value of this book. Its author obviously lacks scientific training (hence the inclusion of a chapter "on some scientific opinions") and adequate knowledge of the "laws" of colour mixture; he fails to