

popular and approximate, designed to keep within the comprehension of a juvenile audience. It cannot, therefore, be subject to the same criteria of criticism as a book professing to be an authoritative guide to serious students. Nevertheless, Prof. Hartridge has accomplished the task he set himself extremely well, and the lectures have been turned into a very readable account of an interesting and fascinating subject. Anyone desiring an introduction to the problems and phenomena of colour and colour-vision could not do better than read this book, which can scarcely fail to afford pleasure in the reading or to leave an abiding interest which will induce him to extend his study to the less elementary and more rigorous literature in which the subject abounds.

Although, as already indicated, the advanced worker on colour will not look here for guidance on theory, science teachers and lecturers will find the book a mine of useful information on effective and fascinating lecture demonstrations, especially demonstrations by projection. Many teachers, even in universities and technical colleges, fail lamentably in giving life and interest to the study of light by adequate demonstrations of an arresting character. Prof. Hartridge has included in the book descriptions of many of the excellent demonstrations which illustrated his lectures. These cover many branches of the subject, and most of them require only simple apparatus which should not be difficult to improvise, even from the resources of a school physics laboratory.

The book is well printed in easily legible type. The illustrations include portraits of Sir Isaac Newton (frontispiece) and Thomas Young. There are many line diagrams and twelve coloured plates. The diagrams, on the whole, are good, except in a few cases where simplification has been carried beyond tolerable limits. The colouring of the plates is rather crude; but this is not likely to mislead the reader.

J. GUILD

A Camera in Antarctica

By Alfred Saunders. Pp. 160 (72 plates). (London: Winchester Publications, Ltd., 1950.) 21s. net.

THIS book, a record of fifteen years of photographing in the Antarctic, is noteworthy for its really magnificent collection of illustrations. Whether he is showing his reader 'close-ups' of bird or animal, or of scenery, Mr. Alfred Saunders contrives to excel, not only as a photographer but also as an artist. The general standard is so high that it is not easy to single out illustrations, but there is on p. 70 a remarkable photograph of the wanderer albatross. This great sea-bird has a wing span of twelve feet, which, incredible as it may seem, is almost double the wing span of the male golden eagle. The eggs of the wanderer albatross, we are told, weigh 1 lb. and are good eating; only one egg is laid. The Antarctic summer is too short for the growth of the young albatross, which remains in the nest unfledged throughout the winter with its blizzards and severe frosts. It is supposed that during the winter the parent albatrosses do not visit their young, which subsist on their accumulated fat; but Mr. Saunders believes that they do occasionally return and feed the young.

There is a truly remarkable series of photographs of the various Antarctic penguins, and we are shown one of an Adelie penguin being pushed by its large chick during feeding operations to the very edge of a 600-ft. precipice. The author mentions that one day he saw two penguins which had evidently fallen

over this cliff. They appeared almost lifeless, and, a few feet away, Skua gulls were waiting for them to die. Yet when he visited the place the following day he found the penguins had almost recovered, and were actually walking about. That a flightless bird should survive after a fall of 600 ft. is almost incredible, especially when the descent ended not on the water but on rocks.

SETON GORDON

The Biochemistry of the Nucleic Acids

By Prof. J. N. Davidson. (Methuen's Monographs on Biochemical Subjects.) Pp. ix+164+4 plates. (London: Methuen and Co., Ltd.; New York: John Wiley and Sons, Inc., 1950.) 7s. 6d. net.

PROF. J. N. DAVIDSON's little book, the first of a new series of 'Methuen Monographs', was published last autumn and has already proved its value to both research workers and students. It gives, in a short space, a very fair account of the chemistry and properties of the nucleic acids, leading to a fuller account of what is known of their function and metabolism. It is remarkable how much recent research he has managed to include in a small book. Although, as he points out in the preface, significant advances have been made since the book went to print and will no doubt continue, yet, broadly speaking, the emphasis is on recent work, and the serious student will find it an excellent introduction to the many researches which are going on.

It is a very remarkable fact that, although a close connexion with the processes of reproduction is suggested by the presence of nucleic acids in the chromosomes and in various particles which are known or suspected to be self-reproducing, and also by the close correlation between the onset of nucleic acid synthesis and the start of the mitotic cycle, no real clue has come to light as to their real function. Many workers have studied these compounds in the belief that they may perhaps discover in them the molecular nature of the gene, yet so far no one has been able to suggest a plausible method by which they could act in this way. All those biologists as well as chemists who want to know the real facts of the case could not do better than study this account.

The Complete Garden Handbook

By Maron J. Simon, John Elliott, Dickson W. Pierce and Beatrice P. Hendrix. Pp. xii+451+32 plates. (New York: D. Van Nostrand Co., Inc.; London: Macmillan and Co., Ltd., 1950.) 37s. 6d. net.

THE aim of the authors of this comprehensive volume is to give "information on every topic of interest to the gardener, including planning the garden, choosing flowering plants, shrubs and trees, and every step in practical gardening". It is designed for American readers and will no doubt be welcomed by them for its completeness and handy size. It is inevitable that many of the terms used sound strange to British ears, and it is to be hoped that the American habit of telescoping plant names wherever possible (for example, "Morningglory") will not spread across the Atlantic. The volume is lavishly illustrated in colour; but, it must be said, the standard of the plates, both in design and execution, is very low. It is difficult to imagine what value there could be in a picture, however good, of a single, unnamed, daffodil flower; but when this appears (Plate 11B) as an unrecognizable yellow 'star-fish' against a bright blue sky, the result is deplorable, and the majority of the plates are of much the same standard.

J. S. L. GILMOUR