

Canada

A Study of Cool Continental Environments and their Effect on British and French Settlement. By Prof. Griffith Taylor. Pp. xiv+524+8 plates. (London: Methuen and Co., Ltd., 1947.) 25s. net.

A STUDY of the geography of Canada was much needed by students, who have little access to any objective consideration of that country. Prof. Griffith Taylor has supplied this want in great measure. The book is based on extensive travels in many parts of Canada and also in Newfoundland, which is included in the volume. Part 1 treats of the position, discovery and general physical features, including climate; part 2 considers the Dominion by natural regions; part 3 is a study of environments as related to man—a careful consideration of occupations and population problems. The whole is illustrated by a wide range of sketch maps and diagrams, many of which show great ingenuity.

Proximity to the North Polar regions has been a certain disadvantage to Canada in the past; but with the advent of aerial navigation may prove an asset, since air traffic is not restricted by ice-bound seas or lands. Great-circle routes are thus becoming of increasing importance. Prof. Taylor admits that he is somewhat of a determinist, that man can accelerate or retard the progress of a country's development, but would be unwise if he attempts to depart widely from the directions indicated by natural conditions. Thus he reaches the conclusion that, keeping to the standards of a rich new country, the population potentiality of Canada is some fifty million, or on general European standards twice that figure. These figures are reached by close reasoning which merits careful attention. The book is a valuable study and indispensable to students.

Surrey

By Eric Parker. (County Books Series.) Pp. viii+256+49 plates. (London: Robert Hale, Ltd., n.d.) 15s. net.

THE County Books aim at giving "a true and lively picture of each county and its people set against the background which has made it what it is." The present volume is one of the first of the series and its author is well chosen, being a field naturalist of repute and author of the well-known "Highways and By-ways of Surrey".

It is not a topographical work in the usual sense but contains much of the kind of information not found in guide-books. Without losing sight of his home county, the writer discourses pleasantly on themes which often carry him beyond it. He ranges from ancient camps to women's institutes and from the Pilgrims' Way (which he exposes as a fraud) to Brooklands. In separate chapters he discusses folklore, dialect, the economics of farming in 1850 and the vanished industries. He deals broadly (geologists might say summarily) with soil and structure, and generously with the scanty materials of Surrey archæology. Architecture he leaves to the photographer, and, except for museums and roads, ignores everything urban and suburban.

The greater part of the book is concerned with the author's own study of the life of the countryside. For so accessible a county Surrey has a surprising variety of wild life. Mr. Parker, from personal observation over many years, states that in 1939 it was richer in water birds than at any time in living memory, and he believes there are signs of recovery from the setback due to war-time defence measures.

With much first-hand evidence he discusses the habits of nuthatches, crossbills, bullfinches, wrynecks and other rare birds, and, in controversial mood, propounds a theory of the drumming of woodpeckers. The red squirrel, he thinks, has been completely ousted by the grey, but many less familiar mammals—among them water-shrew, badger, polecat, pine marten and hare—still flourish. In similar vein he dilates upon butterflies, moths, dragonflies and the living population of woodland, garden and pond. These chapters contain much of interest for the naturalist and many suggestions to stimulate further inquiry.

The book is well printed and produced, with a good index and many fine photographs of landscape and architectural subjects. To conclude it with a featureless sketch-map dominated by roads and railways is anti-climax. W. E. S.

Introduction to Modern Physics

By F. K. Richtmyer and E. H. Kennard. (International Series in Pure and Applied Physics.) Fourth edition. Pp. xvii+759. (New York and London: McGraw-Hill Book Co., Inc., 1947.) 36s.

THERE must be very few students of advanced physics who are unaware of the contents and scope of Richtmyer's important book. The appearance of the fourth edition is indeed most welcome and a matter of hearty congratulation to Dr. Kennard, who has kept the work so well up to date. The additions to the latest edition cover the more important advances of the last five years, and mainly take the form of extensive new sections on the properties of the nucleus, including details of the meson, fission and the transuranic elements, and on cosmic rays. Some basic portions of the chapter on atomic structure and optical spectra have been rewritten, with much advantage.

In the concluding paragraph of the final chapter we find the interesting statement that it will be a dramatic day when mesons are for the first time generated in the laboratory. It appears from recent notes that the announcement of this dramatic discovery was somewhat accidentally delayed, and the reviewer now awaits the announcement that someone with access to a cyclotron is attempting to measure the magnetic moment of a meson by a modification of the Alvarez and Bloch resonance method which was so successful with the neutron. L. F. BATES

Practical Biology for Medical and Intermediate Students

By C. J. Wallis. Second edition. Revised, enlarged and re-set. Pp. ix+396. (London: William Heinemann (Medical Books), Ltd., 1947.) 21s. net.

THE second edition of this book has been extensively revised and contains much new material which will, no doubt, add to its usefulness. More than a hundred of the illustrations are new and others replace some which were present in the first edition and which were taken from other text-books. Apart from those taken from other books, the illustrations are very rough sketches which are not improved by crude shading such as one would not welcome in the work of the students for whom the book is intended. They are by no means always accurate, especially in the section on embryology, in which two transverse sections appear to have been drawn upside down, and in which Fig. 197 will do little but mislead. This is not a book which the reviewer would be happy in recommending to students. P. D. F. MURRAY