

occurred the physical changes which take place in the pregnant woman are described to them: "Her tissues become fluid and softened so that, for instance, in some you can almost bend the bones under the finger. All the tissues undergo this change—liver, bones, hair, eyes, brain—all are flooded with the circulatory fluids of the body so that their essence seeps out and is carried round in the blood to the womb where the growing child can draw upon it for its nourishment and growth" (p. 87). It is perhaps not surprising that one of the very few research projects the authors mention is not of great practical importance: "Experiments were under way at the Centre, before war brought our work to a close, to find bio-chemical evidence in the father of parenthood occurring in the family".

In evaluating the work of the Peckham Pioneer Health Centre, a biologist is driven to judge the social and scientific aspects of the work very differently. There can be no doubt that the members of the Centre benefited socially and medically from its services; but the scientific results published in these books do not seem commensurate with the opportunities offered. I think it is important to indicate that the defect lies not in the nature of health centres, but in the preconceived ideas of these experimenters. While great credit must be given to the Peckham biologists as pioneers in the health centre movement, it would be a pity if further progress in such an important technique of medical research were prejudiced by their views and methods, which many people will find scientifically unacceptable.

M. L. JOHNSON.

CHEMISTRY OF LARGE MOLECULES

The Chemistry of Large Molecules

Edited by R. E. Burk and Oliver Grummitt. (Frontiers in Chemistry, Vol. 1, published under the auspices of Western Reserve University.) Pp. xii+313. (New York: Interscience Publishers, Inc.; London: Imperia Book Co., Ltd., 1943.) 3.50 dollars.

THE Chemistry of Large Molecules" is the first volume of a new series entitled "Frontiers in Chemistry" and is composed of eight sections written by experts in the field of macromolecules. The first two sections, compiled by Dr. H. Mark, give a rather brief account of the kinetics of poly-reactions and of the mechanism of condensation, and a concise record of the information available from X-ray study of large molecules. Dr. Kraemer then discusses in the next section the colloidal behaviour of solutions of macromolecules with special reference to the relationship between viscosity and molecular weight. The same author also contributes a good summary of the application of the ultracentrifuge to the study of large molecules.

Section 5, compiled by a team of three experts, is an advanced mathematical treatment of the elastic-viscous properties of long-chain molecules, while the electrical properties are discussed by Dr. Friess in Section 6. The work of Marvel and his collaborators on vinyl polymers is well known, and is here summarized in Section 7 by Dr. Mark himself. The last section in the book deals with the chemistry of cellulose and cellulose derivatives, and is written by Dr. Ott. Each section is supported by an adequate bibliography.

In a foreword the editors of this book explain that Western Reserve University conceived the idea of inviting scientific workers distinguished in particular fields of chemistry to give two lectures each on his particular subject, and the book is based on such lectures. As the title of this series of books suggests, the subject-matter is to be found on the "Frontiers of Chemistry". It is therefore definitely a book for the expert, and of particular value to those who are investigating the course of polymerization and the theory of the reactions.

Much publicity is given at present to macromolecular structures; but the reader will find in this book practically nothing of the spectacular industrial applications of these materials. Instead he will find fundamental mathematical and physico-chemical reasoning, and it would be true to say that without a good knowledge of these sciences the reader will find the book heavy reading. D. D. PRATT.

SKOKHOLM

Dream Island Days

A Record of the Simple Life. By R. M. Lockley. Pp. 144+8 plates. (London: H. F. and G. Witherby, Ltd., 1943.) 10s. 6d. net.

FOR "some to discover islands" is a recognized career for men, like "some to the wars", or "some to the studious universities". Such islands are mostly far away; but to rediscover the forgotten and re-occupy the abandoned ones is work for R. M. Lockley, Compton Mackenzie, Fraser Darling, Seton Gordon, and other men of like calibre. For a man's island is his kingdom, and becomes his paradise; and a bird-lover among his own island-birds lives, as it were, in Eden.

This book is not a new one. It mostly repeats what Mr. Lockley wrote about his "Dream Island" some fifteen years ago; but he lived there for years after, until there was no more peace anywhere, and now he tells the 'simple story' of his island-life, with wife and child, among the wildfowl. The usual lover of birds has his life embittered by the sportsman and his game-keeper or 'vermin-killer', who spend their selfish lives slaughtering falcon and buzzard, crow and raven, merlin, jay and magpie, and many another beautiful creature which has its place in poetry and its corner in the kindly hearts of men. But on one's own island one lives at peace with all bird-kind, even—by a stretch of charity—with the great black-backed gull.

Mr. Lockley's book on "Shearwaters" was one of the great bird-books of our time. Now we may read again of that strange sea-fowl, which meets us in Homer and in Virgil and in Ovid; which is here by thousands; which flies from Pembroke to the Bay of Biscay for its dinner; which sits for two full months on its solitary, subterranean egg; which feeds its downy chicken for two months more, and then leaves it lonely and desolate (but a delicious morsel) until hunger drives it to seek the unknown sea. We walk round the little island; pass by 'Puffin-town' with its population of 40,000 puffin-souls; tread on wild-thyme, campion and sea-pink; watch the pair of ravens and the pair of peregrines, part-owners of the place; and see the few choughs and many carrion crows, the whin-chats and the meadow-pipits, perhaps the host of migrants in the spring; and the grey seals on the beach below the cliff. A wonderful place, and a delightful book—too good for anybody but a naturalist. D'ARCY W. THOMPSON.