

tative contents of Volume 2, it might be fair to suggest that the title should be "Chapters in Biophysical Chemistry". Although some subjects (those in which the authors are particularly interested) are discussed in detail, others are scarcely mentioned. Enzyme processes are only briefly mentioned under the binding of molecules to proteins. Diffusion is not included in the elementary theory, suggesting that the authors think that diffusion processes are of no importance in biological systems. Under polybasic acids one might have expected at least some account of the titration of nucleic acids, and although hydrogen bonds get fourteen entries in the index, there is no mention of hydrogen bonding in deoxyribonucleic acid.

Nevertheless, many libraries will be glad to have this volume on their shelves for the accounts of specialized topics such as the dissociation and dielectric properties of amino-acids, peptides and proteins, and for the excellent account of protein-ion interactions.

J. A. V. BUTLER

HOMAGE TO THE HERRING

The Herring and its Fishery

By Dr. W. C. Hodgson. Pp. xiv+197+9 plates. (London: Routledge and Kegan Paul, Ltd., 1957.) 25s. net.

STATES have arisen and fallen, fortunes been made and lost, scientific reputations built up and humbled, through this lowly fish. Beauty is framed in pearls from its scales, art created from its dead body, heroism fashioned in the men who catch it.

It is fitting that the herring should have honour done to it; and in this book Dr. Hodgson—than whom there is no one better qualified—does just this in full and honest measure, and in a refreshing manner.

When M. Graham's "Sea Fisheries" (London, Arnold, 1956) appeared marine biologists were quick to note that the herring—although it had been so intensively studied—had no special chapter. It was perhaps natural then to hope that Dr. Hodgson would make good this deficiency, and that his treatment would make it an acceptable companion for that of his former director and colleague of long standing. This it is not. It has no bibliography, few references, and gives little help to the reader who wants to inquire further. But it remains a good book.

Two statements have recently come from the Lowestoft Fisheries Laboratory: one is in this book (p. 73), and is "Life to-day is ruled by science"; the other, on the dust-wrapper of "On the Dynamics of Exploited Fish Populations" (R. J. H. Beverton and S. J. Holt. H.M. Stationery Office, 1957), is "Science is prediction". These two statements and the logical consequences which flow from them are no more true to-day than they have ever been; but they seem to have determined much of Dr. Hodgson's attitude to his subject, and shaped the course of his researches.

He paints a clear picture of his methods of age determination, of the assessment, composition, and recruitment of stocks, of the possible origins and migrations of the shoals providing the major fisheries, and leads up by closely argued reasons to the basis of his predictions, ending in an admission of failure. It is hard to see how all this could be written without even a mention of Ford, Storrow, Farran, Holt, Cushing, Burd, and many others who have studied these problems so extensively.

In conclusion, he decides (p. 177) that only in "natural causes and fishing" is the responsibility for the "collapse of the East Anglian fishery" to be sought. He rejects the first, and accepts that it is the growing exploitation of the immature fish on the "Dogger nursery" for conversion to meal for animal feeding which is the principal agency in this collapse. Many agree with him; but others, who also accept that fishing activity is the responsible agent for the decline, have different views. There is, moreover, the insidious menace of pollution, the danger of which to sea fisheries in contained areas such as the North Sea remains almost wholly unsuspected even in the most enlightened quarters, and which he apparently has not considered.

H. O. BULL

A MELANESIAN URBAN COMMUNITY

The Great Village

The Economic and Social Welfare of Hanuabada, an Urban Community in Papua. By Prof. Cyril S. Belshaw. Pp. xviii+302+8 plates. (London: Routledge and Kegan Paul, Ltd., 1957.) 30s. net.

IN immediate contact with Europeans in Port Moresby, capital town of Papua—which is administered by Australia—there lives a community of indigenous Papuans. This interesting account describes something of the social and economic life of these Melanesians, and discusses certain administrative problems that have arisen as a result of their living in an introduced environment. Their own culture has been severely affected by Western custom, and it has not always been possible for the Administration to find an acceptable substitute for the loss of a traditional practice. For example, living accommodation for the people of Hanuabada, "the Great Village", became an acute issue after the Second World War when the village, having been evacuated, was re-established. Thatched houses are not, however, satisfactorily replaced by buildings with an unceiled, corrugated iron roof and wooden walls (but has any Pacific administration found the solution to the modern housing problem?).

The picture presented of this community to-day is a complex one. The villagers are Christians; yet they continue to practise sorcery and to worship the spirits of their ancestors. They have retained an urgent sense of the importance of ceremonial, as practised in the exchange of goods and in feasting; but whereas craft products like arm-shells constituted an essential element in exchange, these are now in part—though only in part—replaced by cash; and the monetary substitute has come to be accepted. Cash is now habitually used also for purchasing some of the articles required for presentation on social occasions, such as weddings and deaths; and cash itself is similarly used as a gift. This demand for cash urges those in need of it for these purposes to go out and work for monetary reward. But the point to note is that cash has only partially replaced the ceremonial products customarily used. Again, the traditional dancing ceremonies—frowned on by mission supporters as being against the Christian moral code—are performed less frequently now than hitherto, and contemporaneously there has been a decline in agricultural production; the nexus here being that feasting was and is an essential accompani-