that is excellent, there is also much that is sub-standard. Surely it was not necessary for the publishers to reduce some of the diagrams to such a size that details are no longer decipherable, nor to split Figs 2.4 and 6.6 each into two halves on non-opposing pages. Misspellings and inconsistencies of usage are frequent, and an almost total lack of hyphens in the text leads to many perplexities: is not the concept of "peat forming vegetation" botanically and grammatically irreconcilable?

This is, then, a book and reference source to recommend to all those interested in peat and peatlands; but one that, because of the abundance of apparently unnecessary ecological jargon in some chapters, will not perhaps be readily comprehended by persons without specialist background knowledge.

JOHN H. TALLIS

Monument to microbes

Microbiology, including Immunology and Molecular Genetics. By Bernard D. Davis, Renato Dulbecco, Herman N. Eisen, Harold S. Ginsberg, W. Barry Wood, jun. and Maclyn McCarty, (Second Edition). Pp. xv+1562. (Harper and Row: Hagerstown and London, 1973.) \$27.50.

THIS is an impressive book in scope, size and authorship. Clearly Gray's *Anatomy* can no longer claim a monopoly that, by bulk and weight, it can simultaneously generate a hernia and profound depression in the medical student who handles it! Any student depression initially engendered by the obvious mass of knowledge purveyed in this volume must surely be offset by the subsequent discovery of a pleasant, readable style, clear, helpful diagrams and illustrations, and a splendid layout.

The vital statistics of this second edition command respect—94 of the 1,562 pages are needed to index its 64 chapters! Substantial revision has occurred and new chapters have been introduced to keep pace with the relentless march of knowledge. The untimely death of Barry Wood necessitated contributions on the pathogenic bacteria from a panel of experts (who reveal their presence by eschewing SI units) under the special editorship of Maclyn McCarty. The book is divided into five principal sections comprising bacterial physiology, bacterial and molecular genetics, immunology, bacterial and mycotic infections, and virology, and, as might be expected from such distinguished authors, the overall treatment is very good, with emphasis on scientific method. The avowed intention to produce a text that tells the medical student not only what is known but how it came to be known, has been

amply realised.

Inevitably in a book of this size there are points to criticise. Thus the claim that bacterial glycogen synthesis involves uridine diphosphate glucose, confusion between free and standard free energy changes, and omission of the unifying concept of adenylate energy charge when discussing metabolic regulation, are some of the blemishes I noticed. But they do not detract significantly from a monumental work which should provide not only students of medicine and the paramedical sciences but also their biological colleagues with a very useful and comprehensive text.

E. A. DAWES

Deep sea fish

Fishes of the Western North Atlantic, Part 6. (Memoir of the Sear Foundation for Marine Research, No. 1.) Pp. xix+698. (Sears Foundation for Marine Research, Yale University: New Haven, 1973.) \$27.50.

THE series of publications under the general title of *Fishes of the Western North Atlantic* is too well known to need introduction. The first volume, produced in 1948, was written entirely by the late H. B. Bigelow and W. C. Schroeder and quickly became a classic source of information on the sharks with which it dealt. It set a standard of excellence which seemed to be almost too high to be maintained in succeeding volumes. Twenty-five years later the sixth part of the series has been published and shows convincingly that the standard is in no way diminished.

Two important policy changes are announced with this volume. First, that in future material will be published as it becomes available rather than in systematic order (and thus waiting for laggard contributors). The second change is to permit publication of new taxa within the volume rather than insisting on prior publication elsewhere. Both changes make good sense as attempts to speed the production of further volumes towards the eventual coverage of the western North Atlantic fish fauna.

Part 6 of the FWNA contains the following contributions: the order Heteromi (Notacanthiformes) by S. McDowell, the suborder Cyprinodontoides (the brackish and salt-water killifishes) by Donn E. Rosen, the order Berycomorphi (Beryciformes) by Loren P. Woods and Pearl M. Sonoda, the order Xenoberyces (Stephanoberyciformes) by A. W. Ebeling and W. H. Weed, and the Macrouridae (rat-tails or grenadiers) by N. B. Marshall and Tomio Iwamoto, preceded by a general account of the order Anacanthini (the Gadiformes or the cod fishes). To

produce a collection of contributions by so many authors is a major feat on the part of the editor Daniel M. Cohen and his editorial board.

Most of the groups treated in this volume are deep-water fishes which have presented many taxonomic problems in the past. Many of them are also known from relatively few specimens. The value of the volume is therefore very considerable.

McDowell's contribution in unravelling the complicated synonymy of species of spiny eels and halosaurs is a major feat of taxonomy, to which is added a penetrating account of the anatomy and relationships of these fishes. McDowell has summarised the literature and much unpublished information on the distribution and biology, as well as giving detailed accounts of structure and morphology of each species.

Rosen's discussion of the killifishes or euryhaline toothcarps is necessarily different from the other contributions, for this group is primarily freshwater with relatively few euryhaline species. All the marine or brackish toothcarps found on the American Atlantic coast are listed, with notes on their range, clear illustrations, and with a key for their identification.

The berycoid fishes comprise a mixture of deepwater "soldiers", *Hoplostethus* and other genera, together with

Jellyfish

Aequorea victoria, the largest common jellyfish in the area covered by *Seashore Life of Puget Sound, the Strait of Georgia, and the San Juan Archipelago*, by Eugene N. Kozloff. (University of Washington: Seattle, November 1973.) Boards \$15.00; paper \$6.95.