that taxonomy of many groups is still in some confusion. Difficult organisms are still difficult even with the 8th edition.

From a medical viewpoint there are definite areas of confusion. Perhaps the most obvious are concerned with pathogenicity. Thus, staphylococci but not streptococci are noted to include pathogenic species, and while there is fairly detailed comment on the pathogenicity of members of the genus *Citrobacter*, there is no comparable comment in respect of *Salmonella*, *Shigella*, *Serratia*, *Klebsiella*, etc., and the genus *Acinetobacter* is misleadingly stated to consist only of "free-living ubiquitous saprophytes". The other area of confusion is antibiotic sensitivity. Even in the context of identification rather than chemotherapy, the statement that staphylococci "are usually sensitive to β -lactam antibiotics" requires considerable amplification.

Although the parent text and its offspring share certain problems, few affect the shorter version alone. Indeed, its uncluttered text sometimes yields more information than the original. In this it fulfils its stated purpose admirably.

I. PHILLIPS

Botulism. The organism, its toxins, the disease

By LOUIS DS. SMITH. 1977. Springfield, Illinois: Charles C. Thomas. Pp. vii and 236. US\$18.75.

A concise and interesting historical introduction is followed by a careful analysis of the complex and confusing literature on the organisms that are grouped within the species *Clostridium botulinum* types A-G. The spores and their various degrees of resistance to heat, radiation and other deleterious agents are considered in detail with special reference to differences that may be observed in the behaviour of spores of organisms of the same type and between spores of organisms of different types. A short chapter on bacteriophages, bacteriocins and bacteriolysins contains much intriguing up-to-date information. There is a helpful section on the demonstration and isolation of *C. botulinum*, and the detection of the toxin in food, and there is a very full account of the geographical occurrence of the different types of the organism in soil and sediment, with notes on its occurrence in food.

The potent neurotoxins of types A-G are reviewed in detail and views on the action of the toxins are carefully presented and evaluated. There is a brief but helpful consideration of botulinum toxoids. The chapters on the occurrence of botulism in man, animals and birds are full of interest, and there is a very practical account of the disease in man.

Dr Smith has given many useful selected references after each chapter and he has been able to keep his text succinct and admirably readable. He combines experience with competence and humility, and his authoritative book can be warmly recommended.

J. G. COLLEE

Anaerobic bacteriology: clinical and laboratory practice

By A. TREVOR WILLIS. 1977. 3rd ed. London, Boston, Sydney, Wellington, Durban, Toronto: Butterworths. Pp. v and 360. £10.00.

This third edition of a successful book is welcomed. There are major additions that take account of developments in anaerobic methodology and there are good new sections on the non-clostridial anaerobes and the clinical syndromes with which they may be associated. The text in general has been most carefully revised and updated, and the bibliographies at the end of the chapters are splendid.

Dr Willis has a rare facility to write succinctly and in readable style while still taking account of the extensive and confusing literature. At many points he makes very good analyses and gives clear and authoritative guidance.

In the light of our own experience, I would take gentle issue with one or two statements; for example, that gas cylinders with hydrogen and CO₂ mixtures need to be held horizontally to prevent layering, and that all strains of *Bacteroides melaninogenicus* are sensitive to penicillin. The important point is that there is so much up-to-date and valid information in this book. It is a practical text written with care by a man with much experience of his subject.