virus types A and B and in the immunology of these infections all receive little mention. This really means that the time is not yet ripe for a definitive monograph on this subject.

Finally, the paucity of illustrations, even as a measure of economy, is surprising as is the absence of an electronmicrograph of the complete hepatitis B virus, apart from a single Dane particle tucked away in the margin of plate VI. The printing is by phototype set, and the use of poor quality paper containing a significant proportion of re-cycled fibre, claimed as the publisher's contribution to conservation, and the occasional lapses in binding suggest that the age of the disposable "hardback" book has regrettably arrived.

A. J. ZUCKERMAN

**Urinary cytology**


This monograph is a well bound and clearly printed text of 158 pages intended to provide the cytopathologist and cytotechnologist with a working knowledge of practical urinary cytology. After a brief historical review, the author devotes eight pages to methods of collection of samples from the urinary tract and to the preparation and staining of the cellular content. The art of microscopical diagnosis can only be achieved when there is understanding of the effects of disease upon normal microscopical anatomy. Rightly, the author describes the histological changes, correlating them with the cytological ones, and stressing in particular those due to viruses, drugs and neoplasia. The concluding chapter is devoted to the cytopathology of the prostate.

Diagnostic cytology has become an essential and valuable tool for following both developing and treated cancers of the bladder, and 6-monthly urinary examinations are mandatory for persons exposed to defined industrial carcinogens. Carcinoma of the prostate is increasing in incidence and is the fourth commonest cancer in the UK and the second in the USA. Thus, there is a need for acquiring skills in the difficult field of urinary cytology. Does the author succeed in his intentions? To learn cytology from pictures, particularly if they are black and white photographs, is often difficult. Some years ago, I heard Hertig quote his old chief, Wolbach, thus: "The most important question in cytology is to ask 'Where does the cell come from?'" The novice can master the art if the principles are grasped and a discipline of good preparation, careful microscopy and clinical follow-up is established. I think this first edition will serve its purpose well.

MAX LEVENE

**Recent advances in clinical immunology**


The editor of a series of books entitled "Recent Advances in Clinical Immunology" has an unenviable task because to promote "recent advances" in any subject presupposes that the subject in question has been satisfactorily defined. Clinical immunology, as everyone recognises, lies uneasily between three territories of medical concern, on each of which it partially encroaches. Firstly, there are disorders, such as primary immunodeficiency, that present clinical problems of diagnosis and management and yet are predominantly immunological in nature. Such topics emphasise that clinical immunology is a part of clinical medicine. Secondly, diagnostic techniques, such as tests of the complement system, that analyse the immunological features of disease in the laboratory, have been introduced; clinical immunology is thus seen to add to the diagnostic skills of the clinical pathologist. Finally, immunological processes in varying degree are involved in the pathogenesis of a wide range of diseases. In this context, clinical immunology is of great academic interest, but of less practical concern to clinicians; it is still possible to be a competent rheumatologist but to remain unmoved by the plight of New Zealand mice. Given the diffuse nature of the subject, this volume betrays the impossibility of providing a balanced diet that will satisfy all clinical immunologists.
There are useful chapters on the clinical use of antilymphocyte globulin (Barnes), the specific correction of immune defects (Buckley), the immunotherapy of leukaemia (Freeman) and the treatment of allergic disease (Smith) for those clinical immunologists who practise their art with a stethoscope in one hand and a syringe of gammaglobulin in the other. One can add a sour note by pointing out that in at least one of the topics, "recent advances" appear to have followed a circular course. The measurement of immune complexes (Zubler and Lambert), the enumeration of T and B lymphocytes (Hayward and Greaves), and the assessment of granulocyte function (Bjorkstein and Quie) are dealt with in chapters written by experienced and knowledgeable authors; these chapters will prompt the clinical pathologists to review the services they provide, particularly in specialised centres. Finally, intellectually curious doctors, irrespective of their official commitments, will enjoy reading the remaining chapters in their armchairs.

The immunological problems of protein malnutrition (Douglas and Faulk), ageing (Adler, Jones and Nariuchi) and amyloidosis (Rosenthal and Franklin) are dealt with in highly competent academic essays. However, much of the material is esoteric or derived from animal experiments.

Some additional comments are unavoidable. In the face of the current plethora of new immunological texts, it would take miracles of innovative imagination for successive publications to provide much that is fresh or novel. This book contains nothing that has not been summarised elsewhere, often several times over. Nor does it provide a comprehensive guide to any facet of clinical immunology. In a discursive anthology, it would also be reasonable to anticipate a modicum of prophetic utterance or even quixotry. Unfortunately, despite its brave title, the first volume in the series disabuses the reader of any such expectations.

A. M. DENMAN

Antifungal compounds

The medical microbiologist will find little of interest in this volume which is almost entirely concerned with fungicides in agriculture and horticulture. Of the antifungal drugs considered in Volume I, the most important currently used for the treatment of systemic fungal infections, amphotericin B, 5-fluorocytosine, clotrimazole and miconazole, are not even mentioned here.

In a chapter entitled "Effect of fungicides on nucleic acid synthesis and nuclear function", Dekker states that after oral administration of griseofulvin, the growth of the fungi in the skin cells is inhibited and the actual killing of the fungus is not necessary, as the keratinised cells are thrown off. In temperate climates, most dermatologists use topical remedies for smooth skin infections and reserve griseofulvin for infections of the scalp and chronic infections involving the nails. The fact that griseofulvin is fungistatic is probably the reason why toenail infections, even if they improve, all too frequently relapse when griseofulvin therapy is stopped.

The physician concerned with industrial hazards in agriculture and horticulture will find this volume a useful source of information on the toxicity, activity, biological conversion and degradation of fungicides in common use. For that reason, it should be available in the appropriate reference libraries.

R. R. DAVIES

Man meets microbes

This is, on the whole, a well written, up-to-date account of medical microbiology, intended for students of nursing and allied medical disciplines. It contains perhaps rather more than required for the average nurse in the UK, but will be a fine book for a nurse with an enquiring