necessity of allying structure with function. It is particularly gratifying to find a subject such as metaplasia, which receives scant attention in many works on pathology, dealt with so completely. When discussing repair and regeneration some clarity of definition is lost and it is a pity that a confusing and contradictory term such as "compensatory regenerative hyperplasia" has found its way into an otherwise excellent chapter. At the present time when the wider aspects of immunity are becoming appreciated the chapter on transplantation will be enjoyed by all.

It must have been difficult choosing a title for a work which deals with so many different topics. As in previous works Professor Willis has wisely selected essentially practical problems which concern pathologists and ones on which reliable information cannot always be readily obtained. The clarity of exposition and the concise rendering of the facts are well-known characteristics of the writer. Lists of references are very complete and it is again most valuable for the busy pathologist to have important review articles indicated for him in heavy type. Professor Willis is to be warmly congratulated on his latest work, and it is hard to see how any pathologist alive to his daily problems will be able to avoid the necessity of having a copy on his shelves.

GEORGE CUNNINGHAM.

Le Cancer de la Corde Vocale. By J. Piquet. (Pp. 204; 53 figures. Fr. fr. 1,600.) Paris: Masson et Cie. 1958.

This monograph on cancer of the vocal cord by Professor Piquet, of Lille, is the latest of an international series on otorhinolaryngological subjects.

The monograph contains chapters on aetiology, pre-cancerous states, pathology, and treatment. The style is somewhat discursive, and references are haphazard and inadequate. In a sketchy chapter on laryngeal and cervical lymphatics, in which just one poor and unlabelled illustration appears, there is the following reference:

"Pour la description classique des lymphatiques du larynx, le lecteur pourra se reporter à l'excellent *Traité d'anatomie de Rouvière*, où la question est traitée dans tous ses détails." (!)

Other references are to obscure sources or simply short quotations from discussions at meetings. A bias towards the Continental literature has occasionally resulted in serious lacunae. For instance, the author claims that telerradium techniques are of little value in the treatment of cancer of the larynx without even mentioning the important contributions and results of Lederman in this country. It is furthermore difficult for the English reader to accept Piquet's recommendations for local anaesthesia in total laryngectomy, but it must be remembered that this is in keeping with still much of Continental practice.

This monograph contains much material of interest. It is only a pity that it is marred by careless references and parochialism.

S. S. EPSTEIN.

Radioisotope Laboratory Techniques. By R. A. Faïres and B. H. Parks. (Pp. xii+244; illustrated. 25s.) London: George Newnes. 1957.

The increasing use of radioactive isotopes in general laboratories has made necessary a simple book providing the essential theory and practice of radioisotope techniques. The authors, with considerable teaching experience of the basic principles at the Harwell isotope school, have attempted to produce such a book, primarily for those with only an elementary knowledge of physics. Consequently, they have been compelled to be selective and have concentrated on practical details of choosing and using equipment, theory being kept to a minimum. Suggestions for further reading are given at the end of most chapters.

The first few chapters deal concisely and clearly with the elements of nuclear physics, the properties of radiations, the production of radio-isotopes, and the calculation of radiation dose rates. The chapters which follow, describing laboratory design, radioactive hazards, decontamination, and laboratory apparatus, contain much useful data and practical advice. The major part of the book, dealing with instrumentation and applications, is, however, not quite so successful. The reader with no knowledge of electronics, for whom this book is intended, would soon get lost in the technicalities of the electronic apparatus described. The authors have condensed the chapter on electronic techniques to the point where the explanation of terms frequently used in later chapters is either omitted or incomprehensible without previous knowledge.

Several chapters are devoted to descriptions of the construction and use of particle and radiation detecting equipment. These chapters are uneven in quality. As an example, the authors describe in great detail the types of gases used in Geiger-Müller counters, but give only a sketchy account of the use of some of these counters with no account at all of the use of liquid counters. Scintillation counters are dealt with inadequately, and the chapter on the choice of counting equipment is too brief. On the other hand, the important subject of the statistics of counting is adequately treated by rule-of-thumb methods.

The final chapters describe briefly some chemical and other applications of radio-isotopes and autoradiography (in rather more detail). No account is given of the use of radioactive tracers in medical or biological work. Although the ideal book for non-technical users of radioisotope techniques remains to be written, this book may be recommended as a useful practical guide to the subject.

M. LUBRAN.

Textbook of Virology, 3rd ed. By A. J. Rhodes and C. E. van Rooyen. (Pp. xv+607; 81 figures. 80s.) London: Baillière, Tindall & Cox. 1958.

This edition, larger by 70 pages, maintains the high standard of presentation of the 1953 edition. It is beautifully printed and well illustrated. The authors'

lucid exposition makes for pleasurable reading and they attain their declared objective of presenting an account of the essential features of the virus and rickettsial diseases of man.

The book is designed to appeal to a wide variety of readers, but in order to assist those with a clinical orientation, the virus infections of man are described "depending on the system primarily affected" (p. 5). Since human infection by many different viruses can give rise to the same syndrome, e.g., aseptic meningitis, and because infection with a single virus may cause in man such a diversity of pathological signs as to confound the choice of a system primarily affected, e.g., mumps, this arrangement of the text introduces difficulties. The authors have been at pains to try to overcome these, but the result is not wholly satisfactory from either the clinical or virological viewpoint.

A fundamental drawback is the spatial separation of viruses, which, because they have properties in common, may be considered to form a group. Thus the agents of psittacosis, lymphogranuloma venereum, and trachoma are described in separate, albeit

consecutive, sections. Diseases due to Coxsackie viruses form a section on their own, whereas poliomyelitis and poliomyelitis-like illnesses (Icelandic disease and "ECHO" viruses) appear in the section entitled neurotropic virus diseases in company with rabies and the arthropod-borne encephalitides. Other arbor viruses are in another section on arthropod-borne and tropical fevers.

However, these are criticisms of arrangement and not content. Cross-reference is made easy by indications in both the text and index.

Of particular appeal to general practitioners, pathologists, and students alike will be the references for further reading, and in particular the annotations on laboratory diagnosis. The ever-growing demand for such information and its practical importance in getting the right specimens, at the right time, in a suitable condition for laboratory diagnosis, cannot be over-emphasized.

It is a pleasure to recommend this textbook to everyone requiring a handy reference book on the subject.

G. P. B. BOISSARD.

Association of Clinical Pathologists Broadsheets

The following broadsheets (new series) are published by the Association of Clinical Pathologists. They may be obtained from Mr. G. S. Corden, Swan Press Ltd., 20 Bakers Row, Farringdon Road, London, E.C.1, price 1s. each.

No.	Title	Date	Author
1	The Disc Technique for the Rapid Determination of Bacterial Sensitivity to Antibiotics	1952	R. W. Fairbrother
2	Determination of Sensitivity of <i>M. tuberculosis</i> to Streptomycin	1952	R. L. Vollum
3	The Detection of Barbiturates in Blood, Cerebrospinal Fluid, Urine, and Stomach Contents	1953	L. C. Nickolls
4	The Estimation of Carbon Monoxide in Blood	1953	D. A. Stanley
5	The Identification of Reducing Substances in Urine by Partition Chromatography on Paper	1953	G. B. Manning
6	The Paul-Bunnell Test	1954	R. H. A. Swain
7	The Papanicolaou Technique for the Detection of Malignant Cells in Sputum ..	1955	F. Hampson
8	Investigation of Haemorrhagic States with Special Reference to Defects of Coagulation of the Blood	1955	E. K. Blackburn
9	Daily Fat Balance	1956	A. C. Frazer
10	Mycological Techniques: (1) Collection of Specimens	1956	R. W. Riddell
11	Mycological Techniques: (2) Cultural Isolation	1956	R. W. Riddell
12	Techniques for Demonstrating L.E. Cells	1956	J. V. Dacie and L. S. Sacker
13	The Identification of Serotypes of <i>Escherichia coli</i> Associated with Infantile Gastro-enteritis	1956	Joan Taylor
14	The Determination of Serum Iron and Serum Unsaturated Iron-binding Capacity ..	1956	Arthur Jordan
15	The Estimation of Faecal "Urobilinogen"	1957	C. H. Gray
16	Preservation of Pathological Museum Specimens	1957	L. W. Proger
17	Cultural Diagnosis of Whooping-cough	1957	B. W. Lacey
18	The Rose-Waaler Test	1957	C. L. Greenbury
19	The Laboratory Diagnosis of Fibrinogen Deficiency	1958	R. M. Hardisty
20	Investigation of Porphyrin	1958	C. Rimington
21	Quantitative Determination of Porphobilinogen and Porphyrins in Urine and Faeces	1958	C. Rimington
22	Investigation of Haemolytic Anaemia	1959	J. G. Selwyn
23	The Dried Disc Technique for Bacterial Sensitivity Tests	1959	R. W. Fairbrother and J. C. Sherris