

## BOOK REVIEWS

**The Physiology and Medicine of Diving and Compressed Air Work** by P. B. Bennett and D. H. Elliott. Second Edition 1975. London. Balliere Tindall, £17.00.

The appearance of this authoritative and up-to-the minute work on underwater medicine is very much welcomed. The book is an edited collection of reviews, each written by an internationally recognised authority. Many are pioneers in particular medical aspects of diving. Surgeon Commander Elliott is well known to doctors who have taken the R.N. Course in Underwater Medicine at Alverstoke and directed a record breaking dive to 1500 ft. in Summer 1976.

The book costs £17. There are 29 chapters. Ten deal exhaustively with all aspects of decompression. The remaining chapters concentrate on virtually all physiological aspects of the underwater environment. A chapter on otologic disorders is comprehensive and incorporates all recent work. The book is a sophisticated one. Its value lies in the profound exposition of each subject from basic principles up. It demands a good preliminary grounding in underwater physiological principles if full value is to be obtained. It can be confidently recommended to all diving doctors particularly those who have felt the want of an advanced text. The approach may be rather too academic for doctors occasionally dealing with divers, or for non medical diving club officers. The book is an essential text for professional workers interested and concerned with physiology and underwater medicine. From the broader aspect it is a successful exposition of the problems overcome and still to be surmounted as man advances to work at the depths to be found on the Continental Shelf.

J. D. KENNEDY.

**Hematological Complications in Cardiac Practice** by J. H. Jepson and W. S. Frankl. 1975. W. B. Saunders, Co. Ltd. £7.50.

In their preface the authors tell us that this fascinating collection of articles arose from attempts at interdisciplinary activities involving cardiology and haematology at the Medical College of Pennsylvania. Interdisciplinary lectures and seminars led to a recognition of the extent to which both fields overlapped and to a desire to present to a wider readership the fruits of their cooperation. The resulting series of articles, published in this volume, indicate the success of their approach. The topics range from the "Cardiovascular manifestations of anaemia" to a discussion of "Blood-banking problems in Cardiology" and include such diverse subjects as the haematology of infective endocarditis and the effects of cardiac drugs on the haematopoietic system, the indications for anticoagulants in cardiovascular disease, cardiovascular dynamics in pregnancy and oxygen delivery during human gestation. The busy general physician will find the article on clinical usage and laboratory control of anticoagulation extremely useful. Of more specialised interest, but of increasing general relevance, are the papers on unusual cardiac manifestations of haematological disease (including the complications of drug therapy) and a concise description of the haemolytic anaemia associated with aortic valve prostheses. In short this book contains something for everyone who is concerned with the day to day management of patients with cardiological or haematological problems and should be required reading for specialists, research workers or physicians with a particular interest in these fields. The standard of writing is uniform, the presentation good, the references to each paper ample (although inevitably a little out of date) and the index comprehensive.

It is possible to quarrel with individual recommendations made by the contributors. For instance, not all cardiologists would agree with Dr. Frankl's advocacy of anticoagulants in acute myocardial infarction but at least he indicates that they are controversial and he is careful to refer to the studies which do not support his thesis. Perhaps more serious is the failure to deal with the indications for anticoagulation in patients with valvular heart disease and with cardiomyopathies. This probably reflects current trans-Atlantic preoccupation with ischaemic heart disease. Despite these quibbles the authors are to be congratulated on having achieved their objective and it is to be hoped that the concept of interdisciplinary teaching and exchange of information which resulted in this volume will be applied with equal success to other areas.

BRIAN MAURER.

**Salivary Glands in Health and Disease** by D. K. Mason and D. M. Chisholm. 1975. London. W. B. Saunders. £8.50.

It would be less than frank and more than foolish to make a pretence of knowledge wide competently to review this skilfully blended monograph. After a concise description of the anatomy and physiology of salivary secretion, diseases of the glands are surveyed at length, and the book closes with a useful account of suitable methods of investigation. The authors are too wise to pursue a rigid segregation, as, for example, in the chapter on developmental anomalies Steggerda's studies on a patient with absence of salivary glands are cited to drive a final nail in the coffin of Cannon's curious notion of thirst as a topical peripheral phenomenon.

Personal interest probably explains the extensive coverage of Sjögren's syndrome and Mikulicz's disease and the brevity of the passing mention of uveoparotid fever (sarcoidosis, Heerfordt's syndrome). At the same time it has to be said that surgical management is fairly treated in a physician's world. In examining the commonly accepted epithelial origin of salivary gland tumours, the inference (p.140) that desmosomes are not a feature of cells, other than those in endothelium, of mesenchymal origin is contradicted by the electronmicrographic examination of the intercalated discs in myocardium. John Garret's work on the innervation of the salivary glands, which rehabilitates the old masters Claude Bernard and the neglected John Newport Langley, is adequately noticed and carefully assessed, but the text was written before the discovery of epithelial growth factor which is released in abundance into plasma on alpha-adrenergic stimulation of the submaxillary gland.

Sumptuously produced, liberally illustrated, but inadequately indexed, the monograph is a well-documented source of up-to-date information.

C. S. BREATHNACH.

**Clinical Application of Respiratory Care** by B. A. Shapiro, R. A. Harrison and C. A. Trout. 1975. Lloyd-Luke Ltd. £10.20.

The authors of this book have obviously tremendous expertise in the management of respiratory care patients and they convey this knowledge in a practical and helpful manner which is helped by excellent illustrations. The first five chapters are intended to be a synopsis of the scientific principles of this speciality. These chapters are, at times, so elementary that it is not clear who the book is intended for—the authors state 'all practitioners'. Should "expiration be longer than inspiration"? On enquiry, this elementary fact appears to be in dispute by both text books and doctors, which is rather surprising.

There is no mention of the measurement of  $P_{CO_2}$  by the rebreathing technique, which allows ventilation estimation without arterial puncture. In fact, the authors state "the assessment of the adequacy of physiologic ventilation can be made only by blood gas analysis". They discuss vital capacity in ml. per pound which is an unusual measurement. The section on medication is very sparse. This is partly because the Food and Drug Act prohibits so many drugs in America. In therapeutic chest percussion, mechanical vibrators are not mentioned although they appear to have a definite use.

The English is rather strange to our ears—surely it is not necessary to explain that translucent is defined as 'allows light to come through, but does not allow you to see through'. The definition of asthma as 'an acute onset of muscle spasm in the tracheobronchial tree' is not a good one.

Perhaps the secret of the book is revealed by the statement "the respiratory care practitioner seldom comes in contact with a patient unless a physician has made the decision that respiratory care may be indicated". This is supported by the text which is excellent when the actual respiratory care section is reached and can be thoroughly recommended as a very practical and useful help in ventilation therapy and other aspects of this field. It is reassuring that the authors feel, after explaining how a writing pad should be provided for a patient with an artificial airway, that a universal problem is the loss of personal dignity in this situation.

**Old Age : Some Practical Points in Geriatrics** by Trevor H. Howell. 1975. London. H. K. Lewis. £5.00.

This is not a text book of geriatrics but rather an edited collection of many of the published papers of one of England's best known clinical geriatricians who pioneered in a neglected field of medicine over twenty-five years ago and is entitled to much of the credit for the advances made in the care of the aged both in Great Britain and elsewhere.

The author's broad humanity and clinical acumen are apparent in almost every page. Stress is laid on the importance of careful investigation no matter how ancient the patient and scorn is poured on the diagnosis of "senility" so often used when "failure to investigate" would be a more accurate statement.

The author's careful post-mortem studies related to *in vivo* diagnosis (or misdiagnosis) are known to all geriatricians and he refers again in this third edition of "Old Age" to that multiple pathology which is the norm in advanced years; a multiple pathology which so often reveals ante mortem diagnosis as incomplete or even wildly inaccurate.

Much of what Howell has written, particularly in the chapter on neurological problems, should make us think back over our death certification and ask ourselves "How many certificates were even 50 per cent correct?"

Emphasis is laid on the importance of the silent lesion, referred pain and the confirmation of clinical findings by pathological and radiological investigation.

A valuable additional section on the organisation, staffing and running of a geriatric unit appears for the first time. Most of it is relevant to present developments in this country and could be read with advantage by both medical and administrative staffs.

If one line in the book sums up the Gospel according to Howell it appears on page 135 where he says "—personalities are more important than environment in promoting recovery in the aged,—"

The format and type face are clear and readable. There are a few trivial misprints in this useful, often chastening book which is well worth a place on any clinicians' shelf even if he only regards geriatrics with some distaste.

JOHN F. FLEETWOOD.

**The Acute Coronary Attack.** J. F. Pantridge, A. A. J. Adgey, J. S. Geddes and S. W. Webb. 1975. London. Pitman. Pp 141. £6.00.

Pantridge and his colleagues of Belfast have produced an unusual and valuable addition to the literature on the management of acute coronary heart disease. There are six special sections dealing with various aspects of coronary care, but the emphasis is on management in the very early stages of a coronary attack. The material which is presented is based on Belfast's unique experience with a mobile coronary care system and particularly, because of this, on experience in dealing with coronary attack in its very early stages.

Certain important facts emerge from the work of the Belfast group. In the first minutes or first hour of a coronary attack extreme vagogenic bradycardia and heart block is frequent and may be successfully reversed by atropine. The immediate treatment of block and arrhythmias at this stage may reduce the size of the subsequent infarct and may thus reduce the incidence of cardiogenic shock and pump failure. Their findings are based on an examination of 294 patients with myocardial infarction seen within one hour of the onset of the symptoms. It is also claimed that the aggressive treatment of incipient left ventricular failure and shock in the very early stages may improve survivorship of both heart muscle and patient.

There is a section on the history and development of mobile coronary care units and a description of the utility of the mini-defibrillator developed by the authors. There is a useful section on the prevention of sudden death in the community.

This is a provocative and practical account of the early management of acute coronary heart disease. One is conscious of the authors' avowed commitment to coronary care and particularly to pre-hospital coronary care, a commitment based on immense knowledge and experience. One is equally conscious of their rejection of the nihilistic attitudes towards coronary care in its various forms which are not infrequently expressed. This monograph is essential reading for those concerned with the care of coronary patients.

R. MULCAHY.