Ages when many of the great universities and medical schools of Europe came into being.

All this is necessarily very condensed, but it is so well arranged that a beginner can easily follow what was going on in different parts of the world, greatly aided by map drawings of each region, and so fully dated that he knows exactly where he is in time as well.

The later chapters carry on the story chronologically, leading up to the great clinicians of the 19th and 20th centuries, and the development of systematic pathology and bacteriology. There is an interesting account of American colonial and frontier medicine which will be new to many readers.

It is inevitable, in a book spanning 60 centuries within 180 pages, that some of one's favourites should get short shrift, and it seems a bit unfair that Nobel, the industrial inventor of dynamite, should be allotted two and a half columns and a portrait, just because he provided monetary rewards to a certain number of medical men, while Rokitsky gets but nine lines. Some people, too, may wonder why Almroth Wright gets no mention at all. Following Jenner and Pasteur, Wright successfully broadened the scope of immunization when he used a vaccine of heat-killed typhoid bacilli instead of the live or attenuated vaccines of his predecessors. With his preventive inoculation, typhoid fever, which had been so disastrous in the Boer War, was completely eliminated from the British Army during the first World War. He might also claim to have been the first true clinical pathologist, when in 1906, he was given beds and the charge of his own patients at St Mary's Hospital. Dr Green writes a pleasant, even prose with relevant anecdotes neatly inserted which rivet the attention and aid the memory. One or two call for a little modification.

The nickname 'Limey' for Englishmen in the USA was derived from the use of limes, not lemons, as an antiscorbutic in the British Navy, limes having replaced the original lemons in order to boost the lime growers of Jamaica, although we know now that they are greatly inferior to lemons in vitamin C content. And James Paget's original work during his first year as a medical student was to dissect and describe the larvae of *Trichinae* in the human muscle. He had found them in the dissecting room and was unaware of the disease trichinosis caused by them; that followed later from the work of Zenker and others in Germany. These are trivial objections among a wealth of entertaining notes on personalities and name derivations.

The author and publishers are to be congratulated on producing a book so easy to handle, with large clear print

and unhackneyed illustrations by Mr De Bock. The portraits, which predominate, undoubtedly adorn the text, though they hardly correspond in likeness with contemporary paintings and photographs of the subjects. It is difficult to believe that so many masters of medicine, often enough rough hewn in character, should have had the appealing eyes of gazelles that Mr de Bock gives them.

N. H. SCHUSTER

The Development and Organization of Scientific Knowledge By H. Himsworth. (Pp. 180; 63s.) London: William Heinemann Ltd. 1970.

'The trouble about the Medical Research Council' said one of its critics 'is the regularity with which it delivers the goods'. This view of the Council expressed by a fair-minded and objective critic is one which even its more obsessively hostile opponents would find difficult to contradict. How does it do the trick? Obviously it is not one performed by all research establishments—least of all perhaps by research establishments having strong connections with governments.

Sir Harold Himsworth, being a Yorkshireman, a University College Hospital student and Professor of Medicine, and a man of reasonable modesty as well as erudition and determination, has understandably felt bound not to comment upon one commonly accepted part of the answer. This lies in two things: (1) the nature and extent of the responsibilities which the constitution of the Medical Research Council has placed in the hands of its medical executive secretary; and (2) the outstanding personal and scientific qualities of the three secretaries who have so far served the Council: Fletcher, Mellanby, and Himsworth. These men, besides being distinguished investigators in their own fields, displayed qualities of character and personality which gained the confidence of their colleagues, of politicians and administrators, and of the scientific community. They made it their policy to see that MRC support was available, without fear or favour, to all persons and groups who appeared to qualified assessors as likely to advance natural knowledge in any relevant field.

The Council, besides being fortunate in its three medical executive secretaries, was also blessed by the quality and insight of those who laid its foundations. As Himsworth tells us (page 99): 'These were the jurist and the philosopher Haldane of Cloan, the ex-professor of anatomy and dean Christopher Addison, and that brilliant and unorthodox civil servant Robert Morant. Their solution to the problem was the independent Research Council standing half-way between Government and its departments on the one

hand and research workers and their institutions on the other and having executive authority to administer funds at its sole discretion subject to Parliamentary scrutiny of its transactions. As this device first reached its full development in the council concerned with biomedical research, the establishing of that organization and the significance of this can be taken as an example.'

The importance of the principles therein embodied to British research, not only in medicine, can scarcely be exaggerated. Readers of this scholarly book will find much to provoke thought concerning the structure of scientific knowledge in general terms; and they will note many perceptive analyses of the different ways in which scientific development may be organized in civilized societies. But they will not fail to grasp the fundamental importance which Himsworth correctly attaches to one of Haldane's fundamental points (page 101), namely, that 'science ignores departmental as well as geographical areas'.

Long may it remain so! And if the publication of this book serves as a 'hands-off' warning to any who might wish to have it otherwise, that is another good reason for welcoming its timely publication.

J. HOWIE

Pathology Annual. Volume 4 1969. Edited by S. C. Sommers. (Pp. 334.) London: Butterworths.

This compact volume is the fourth in a series published by Butterworths and edited by Sheldon Sommers. The choice of subjects for this annual review is very wide in range from chapters on normal values, automation of pathological data, and computer teaching of pathology, through the more sophisticated chapters which include many electron microscope studies, eg, repair and regeneration, to narrow subjects like the histogenesis of cardiac myxomas. Each contribution is of a high order which is unusual in review books and it is unfair in a way to single out any one author. The book does, however, pinpoint a number of anomalies. A plea for more postmortem examinations is based on the new knowledge gained from necropsies about derangements which follow 'sustained life'.

The book is a review for histopathologists and little appears which might at first glance appeal to other pathologists, except perhaps for the chapter on intervascular coagulation in myeloproliferative disorders. However, the opening chapter is a firm plea for the breaking down of barriers between pathologists and epidemiologists, and in a significant line the contributor sees community

pathology as a 'stepping stone' to understanding disease in terms of biochemistry. This plea could be extended to other 'disciplines' in pathology. There are so many arguments even in this one book which demonstrate that the divisions within pathology are too rigid, and interplay between the branches needs to be even more encouraged as the boundaries become blurred.

A. G. SIGNY

The Human Placenta By R. Torpin. (Pp. xxiv + 190; 55 figures. \$11.75). Springfield, Illinois: Charles C. Thomas. 1969.

Professor Torpin has been associated with 1,000 deliveries per year for nearly a quarter of a century, and has, naturally examined many thousand placentae. His special interest has been the formation of placenta circumvallata and marginata, and he has postulated the mechanism of the development of these types of placentation. In this present volume, he sets out concisely his theory of the origin of these placentae, and reviews other anomalies of the human placenta.

In his introduction Professor Torpin states that obstetrics, as a science, aside from the embryological portion, 'is still in the stages of advancement of astronomy of the middle ages. It may be one of the last branches of science so afflicted; it still has no firm scientific basis. There is a tremendous hiatus between human embryology, which now has been developed, and clinical obstetrics'. This is, of course, a rather extravagant statement; advances in obstetrics are being made daily in many parts of the world.

Professor Torpin considers his most significant statement that concerning growth of the placenta. He asserts that at any stage of pregnancy the placenta occupies one quarter of the area of the chorionic sac, and enlarges *pari passu* with the expansion of the uterus. He rightly emphasizes the fact that once the placenta has been attached to the uterine mucosa there is no detachment of the villi from the uterine wall as the uterus expands. In this he concurs with most modern embryologists and is at variance with some investigators, for example Grosser, who believe that during pregnancy there is a changing relationship between the attachment of the placental villi to the decidua basalis as the uterus enlarges. The author, however, maintains that there are only two major sources of placental variation: intrauterine site of blastocyst implantation and the degree of attachment of the conceptus to the decidua. All possible modifications, he adds, of these two origins are filled by varieties already known.

In discussing placenta duplex, he refers to this condition found in many other primates. He believes that the site of implantation may determine whether or not a bilobed placenta arises. In order to differentiate placenta duplex from a placenta with a succenturiate lobe, Professor Torpin suggests that the secondary placenta must have a diameter of at least half that of the main placenta. He deals in some detail with placenta circumvallata, a term which has superseded placenta marginata usually ascribed to Kolliker (1870), but, as he rightly points out, was first described by William Hunter. The clinical aspects of the condition are discussed, and some theories as to its aetiology are analysed.

The author deserves much credit for his excellent review of the whole literature, both in English and in other languages, of many aspects of placentation. While some may not agree with all of his conclusions, the book has added to our knowledge of the development both of the normal placenta and of some of the rarer conditions of placentation. The book is well illustrated and produced, and should be read by every obstetrician.

W. J. HAMILTON

Recent Advances in Blood Coagulation Edited by L. Poller. (Pp. ix + 362; illustrated. £5.) London J and A. Churchill. 1969.

This is the first time that haemostasis has been selected as a subject for the 'Recent Advances' series. It is essentially a technical book and to those versed in the subject most of its reading matter is necessarily reiterative and the overall title is not entirely appropriate. Nonetheless the time is certainly ripe for a review of this subject for there have been a number of significant shifts in opinion during the past few years; and the catholic selection of the topics covered allows the reader to revise his knowledge in a pleasant and readable fashion.

There are 16 chapters contributed by a cosmopolitan group of twenty authors selected to provide a wide coverage of all aspects of coagulation and fibrinolysis. In the order in which they appear the authors are: Armand Quick (Milwaukee) who appropriately gives a brief historical review; Davie, Hougie, and Lundblad (North Carolina) discuss coagulation mechanisms; Archer (a Suffolk veterinarian) describes blood clotting in vertebrates other than man; Nossel (New York) covers the early stages of clotting and reviews current thoughts on contact activation; and Hellem and Stormorken (Oslo) discuss platelet adhesion and aggregation.

These early chapters provide a sound

introduction so that this book can be read by non-specialists as well as those concerned in research. The next five contributions have a more clinical flavour: Douglas (Glasgow) and the editor, Poller (Manchester), describe anticoagulant therapy and its laboratory control; Blackburn (Sheffield) and Rizza and Biggs (Oxford) outline the clinical management of haemophilia; Hougie comments on circulating anticoagulants; and Ulutin (Istanbul) discusses the effect of sex hormones on coagulation with a brief note on oral contraceptives.

The next four chapters are devoted to fibrinolysis: a review by Fearnley (Gloucester); the defibrination syndrome (Ingram, London); snake venoms (de Vries and Cohen, Israel); and thrombolytic therapy (Schmutzler and Koller from Giessen and Basle). The final chapter by Ingram is concerned with the laboratory identification of clotting defects.

All in all this is a timely volume, of particular value to clinical haematologists who do not know all the answers to the awkward questions their colleagues devise. It is well worthwhile buying for the clinical laboratory reference shelves. The editor is to be congratulated on his selection of material so that the 16 different chapters blend together.

J. L. STAFFORD

Notice

EVENING LECTURES IN PATHOLOGY

A second series of evening lectures in pathology, organized under the auspices of the British Postgraduate Medical Federation, will be held from November 1970 to July 1971 on Tuesdays and Thursdays from 6.0 to 7.30 pm. at the Institute of Neurology, Queen Square, London, WC1. Although the lecture will be suitable for candidates for the final MRC Path examinations, consultants and senior pathologists will be welcome.

Enquiries for details of syllabus and fees to:

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