Fig. 2.

Fig. 2 Eighteen-hour culture on electrolyte-deficient medium of cryostat section of normal large intestine.

Fig. 3.

Fig. 3 Eighteen-hour culture on electrolyte-deficient medium of carcinoma of colon, showing organisms growing deep in the lesion.

The precision of bacterial localization possible is demonstrated in Figs. 2 and 3 where the growth obtained following culture of neighbouring specimens taken at operation for carcinoma of the colon is seen. Figure 2 is of normal colon showing scanty bacterial growth on its mucosal surface only, while in Fig. 3 bacteria have penetrated deeply into the malignant tissue.

An incidental lesson brought home by the success of this method is the potential risk of infection to operators of freezing microtomes and emphasizes the importance of disinfecting the apparatus.

We wish to thank Miss Sylvia Easton, Department of Medical Photography, Plymouth General Hospital, for the photographs.

Book reviews

The Thalassaemia Syndromes 2nd edition By D. J. Weatherall and J. B. Clegg. (Pp. x + 374; illustrated. £7.00). Oxford, London, Edinburgh, and Melbourne: Blackwell Scientific Publications. 1972.

This excellent book, like the first edition, contains a detailed, up-to-date account of the thalassaemia syndromes. It does not suffer from the common 'second edition syndrome', namely, undue expansion in size, thus although the authors have added much new material, they have cut out what is now redundant. The text is strongest in the molecular and genetic aspects of the subject, many of the ideas expressed being supported by experimental results obtained in the authors' own laboratory. The clinical parts contain excellent descriptions of the various types of thalassaemia and their interaction with the abnormal haemoglobins; however, differential diagnosis and the interpretation of variations in foetal haemoglobin and Hb-A₂ level are less well covered. For example, I could not find the foetal haemoglobin levels expected in normal infants.

To sum up, here is an important book on an important subject. The general haematologist should read it, but its bias towards molecular pathology may not make it the ideal book to consult in clinical practice. The research worker or clinician in the field will certainly want to have it for the up-to-date account of our understanding of these diseases.

E. R. HUEHNS

Electronic Instruments in the Clinical Laboratory By Philip G. Ackermann. (Pp. x + 349; illustrated. £7.00). Boston: Little, Brown and Co. London and Edinburgh: Churchill Livingstone. 1972.

Starting with the general principles of electricity, the author proceeds to describe the theory of operation of the different instruments found in the modern clinical laboratory. The discussion includes not only the electronics involved, but also other physical or physio-chemical principles required for a complete understanding of the instruments.

The operation of vacuum tubes and semiconductors and their use in various types of circuits found in instruments is then described followed by a short introduction to the theory of computers and a chapter on computers in the laboratory. The final chapters deal with test instruments and methods of fault finding in the several types of instrument mentioned. A glossary of terms and suggestions for further reading conclude the text.

In 327 pages Dr Ackermann has packed an amazing amount of vital information and diagrams presented in a direct style which is sympathetic to the needs of the clinical laboratory worker. The book's American origin is evident in references to '115 volts mains supply at 60 Hz', but generally the text is universal.

An excellent book, strongly recommended.

J. M. RIDEOUT