normally ensure competence of the oesophagogastric junction against reflux, and the principal disorders of these physiological processes which cause oesophageal reflux and hiatus hernia. The story unfolds in an interesting and persuasive manner, and the direct personal and at times almost emotional presentation of the author's views makes for easy reading.

The major concepts are all argued primarily from engineering and simple physical principles which are clearly enunciated at the beginning of the book. Each major point is powerfully backed up by critical observations from a range of experimental animal preparations, from radiological studies of both the normal and abnormal, and from assessment of different types of surgical treatment for hiatus hernia. Particularly convincing are the cogent arguments in favour of a prime role for the intra-abdominal portion of the oesophagus in preventing reflux, and also the physical explanation of why a small hiatus hernia would be more likely to have a greater amount of reflux than a large hernia. The lack of appreciable thickening of the musculature at the lower end of the oesophagus has often been put forward as an argument against the existence of a true sphincter at this area. Mr. Daintree Johnson, however, very convincingly proposes that the strength of the muscular contraction required to empty the oesophagus is so much greater than that normally required for prevention of reflux that there is therefore no need for any localized thickening for efficient sphincteric action. Perhaps the weakest arguments are those seeking to explain on a mechanical basis the large number of associated conditions which are believed to be related with histus hernia. In some "spasm" of the longitudinal muscle of the oesophagus is blamed for initiating the

organic hernial defect. It is always, of course, difficult to be certain about the role of spasm. The only other criticism which might be made of this little volume is that the quality of the numerous x rays, particularly those of the otherwise excellent animal studies, is not always good enough for a clear demonstration of the points being made.

Whether all the clearly presented hypotheses prove to be right or wrong, there is no question that this monograph displays a very high order of inquiry into what is an important clinical subject. It is likely that controversy about hiatus hernia will continue. but very real progress is being made in our understanding of the problems, and this type of serious, critical, diligent pursuit of answers to logical practical questions makes an important contribution. Every reviewer of medical books must now surely either publicly or privately bemoan the price. This slim volume is certainly well produced, but it is a pity that it has to cost 30s. for 100 small pages.

IAIN E. GILLESPIE.

The Acute Abdomen

The Early Diagnosis of the Acute Abdomen. 13th edition. Edited by Sir Zachary Cope, B.A., M.D.(Lond.), F.R.C.S.(Eng.). (Pp. 202; illustrated. 28s.) London : Oxford University Press. 1968.

In 1921 a young surgeon published a slim book that preached early and accurate diagnosis of acute abdominal pain, stressed the importance of scrupulous clinical assessment, and decried procrastination. The preface to this book stated, "it would appear that there is room for a small book dealing solely with the early diagnosis of such cases, for there is little need to labour the truism that earlier

diagnosis means better prognosis." It is a great pleasure to welcome, now nearly half a century later, the thirteenth edition of this classic and to congratulate Sir Zachary on his boyish energy in keeping his textbook ever fresh for yet a further generation of surgeons. Literally tens of thousands of housemen and registrars must now have been reared on these clear lessons set out in faultless prose, and one can but guess how much suffering has been averted and, indeed, how many lives have been saved because of the teachings preached in this small volume.

The new edition shows that fashions in disease change. Tabes is now a rarity whereas diverticulitis is becoming increasingly common. Similarly, acute abdominal pain due to tropical conditions is more and more likely to be seen in these islands. There have been suitable alterations in the emphasis of the text to accommodate to these new conditions. The influence of the therapeutic use of adrenal steroids on the symptoms of acute abdominal disease is discussed and a new section on the value of paracentesis of the abdomen in some cases of abdominal injury and disease has been added. Here and there one comes across tests and procedures now seldom used; thus few surgeons today pay much attention to testing for abdominal hyperaesthesia; and I have never seen Loewi's mydriatic test employed in a suspected case of pancreatitis. These are, however, minor points in a book which is well supplied with references to recent publications.

If previous records are anything to go on, we can anticipate that the fourteenth edition of this standard text should appear on its fiftieth anniversary in 1971. No doubt Sir Zachary is already hard at work collecting material for this Golden Jubilee.

HAROLD ELLIS.

Books Received

Review is not precluded by notice here of books recently received.

The Gold-Headed Cane. By William Macmichael. (Pp. 179; illustrated. £4.) London: The Royal College of Physicians. 1968.

The Surgical Management of Rheumatoid Arthritis. By Robert L. Preston, M.D. (Pp. 579+xiii; illustrated. £10.) Philadelphia, London, Toronto: W. B. Saunders Co. 1968.

Medical Plans and Health Care. By Jerome L. Schwartz, Dr.P.H. (Pp. 349 + xxxiii ; illustrated. \$16.75.) Springfield : Charles C. Thomas. 1968.

A Symposium on Carbenoxolone Sodium. Edited by J. M. Robson and F. M. Sullivan. (Pp. 263 +xiv; illustrated. No price given.) London: Butterworths. 1968.

Tuberculosis Control in Developing Countries. By D. H. Shennan, M.D. (Pp. 136+viii; illustrated. £1 1s.) Edinburgh: E. & S. Livingstone Ltd. 1968.

Comprehensive Medical Care and Teaching. A Report on the New York Hospital-Cornell Medical Center Program. Edited by George G. Reader, M.D., and Mary E. W. Goss, Ph.D. Assisted by Barbara Korsch, M.D. (Pp. 391 +xvi. £5 4s. 6d.) Ithaca, New York : Cornell University Press. 1967. London : Oxford University Press. Resuscitation. A Programmed Course. By Leonard P. Caccamo, M.D., Edward Kessler, M.D., and J. Leonard Azneer, Ph.D. (Pp. 113 +vii; illustrated. £1 3s. 6d.) Philadelphia: F. A. Davis Co. 1968.

Hereditary Disorders of Erythrocyte Metabolism. Edited by Ernest Beutler, M.D. (Pp 343+xii ; illustrated. \$9.) New York and London : Grune & Stratton. 1968.

Foetal and Neonatal Physiology. A Comparative Study of the Changes at Birth. By Geoffrey S. Dawes, D.M. (Pp. 247; illustrated. £5 3s.) Chicago: Year Book Medical Publishers Inc. 1968.

Diseases of the Liver and Biliary System. 4th edition. By Sheila Sherlock, M.D.(Edin.), F.R.C.P., F.R.C.P.E., F.A.C.P.(Hon.). (Pp. 809 +xxi; illustrated. £5 5s.) Oxford: Blackwell Scientific Publications. 1968.

Injuries of the Eye, the Lids, and the Orbit. Diagnosis and Management. By David Paton, M.D., F.A.C.S., and Morton F. Goldberg, M.D. (Pp. 161+xv; illustrated. £2.) Philadelphia, London, Toronto: W. B. Saunders Co. 1968.

How to Interpret Electrocardiograms in Terms of Vectors. By Emanuel Goldberger, M.D., F.A.C.P. (Pp. 187+xiv; illustrated. \$10.50.) Springfield: Charles C. Thomas. 1968.

Foot and Ankle Pain. By Rene Gailliet, M.D. (Pp. 148+ix; illustrated. £1 8s.) Philadelphia: F. A. Davis Co. 1968. Immunity to Parasites. Sixth Symposium of the British Society for Parasitology. Edited by Angela E. R. Taylor. Pp. 118 + vii ; illustrated. £1 17s. 6d.) Oxford : Blackwell Scientific Publications. 1968.

The Cultivation of Parasites in Vitro. By Angela E. R. Taylor, B.Sc., Ph.D., and J. R. Baker, B.Sc., Ph.D., M.I.Biol. (Pp. 377+xiii ; illustrated. £3 10s.) Oxford : Blackwell Scientific Publications. 1968.

Endokarditis. Klinik, Atiologie, Pathogenese, Therapie. Edited by Felix Anschütz. (Pp. 264 +x; illustrated. DM. 59.) Stuttgart : Georg Thieme Verlag. 1968.

Orthopaedics for the Undergraduate. By W A. Crabbe, M.D., F.R.C.S. (Pp. 314 + v; illustrated. £1 12s.) London: William Heinemann (Medical Books) Ltd. 1968.

Pathology of Leukemia. By George D. Amromin, M.D., F.A.C.P. (Pp. 448+x; illustrated. \$26.50.) New York: Harper & Row, Hoeber Medical Division. 1968.

Cold Spring Harbor Symposia on Quantitative Biology. Volume XXXII, Antibodies. Edited by Leonora Frisch. (Pp. 619 + xix; illustrated. \$20.) New York: Cold Spring Harbor Laboratory of Quantitative Biology. 1967.

Methods in Cancer Research. Volume IV. Edited by Harris Busch. (Pp. 673 + xv; illustrated. £15 17s. 4d.) New York and London: Academic Press. 1968.