The osmotic pressure of a large number of medicaments has been determined by highly accurate methods, over a wide range of concentrations, and the data compared with previously published figures. Under the stimulus of this work Krogh, Lund and Pedersen-Bjergaard determined the osmotic pressure of tears, and found it to compare well with that of serum, or with 0.9 per cent. sodium chloride. Previously 1.4 per cent. sodium chloride had been accepted as isoosmotic with tears. The authors point out that they had almost completed this aspect of their studies, when this fundamental error became evident.

For serum, the usual standard of 0.9 per cent. sodium chloride has been confirmed by the indirect determination of osmotic pressure on pooled samples of 20 sera. The freezing point depression of 0.9 per cent. sodium chloride, from which osmotic pressures are calculated, has been found to be 0.52° rather than the accepted value of 0.56° (Brit. Pharm. Codex, 1934). The technical reason for this is shown. As a result of this difference in the point of reference, slightly lower concentrations of various solutes are required to make isoosmotic solutions, for example 5 per cent. glucose instead of 5.4 per cent.

The rigorous evaluation of the theoretical principles basic to the determination of osmotic pressure, together with a statistical analysis of experimental errors, is marred by at least one inconsistency. On page 19 the application of Raoult's law in a sample calculation is inconsistent with the definition given for the symbols in the formula. Fortunately, at the dilutions used the error involved is less than that of the experimental determination. Similarly the authors occasionally use the term 'molar,' when 'molal' is the appropriate one. This latter error is perhaps attributable to the translator.

Throughout the book the data are well presented in graphic form; it is excellently printed, and in spite of a few symbols unfamiliar in this country, such as ‰ for parts per thousand, will be a most useful handbook on the subject.

G.H.L.

MINOR SURGERY

By R. J. McNEILL LOVE, M.S., F.R.C.S. 3rd Edition. H. K. Lewis & Co., Ltd. 1948. Pp. viii + 430. 221 illustrations. Price 22s. 6d.

Love's 'Minor Surgery' is an excellent, compact handbook, and the third edition is a welcome arrival. This convenient small volume aims to provide the hospital interne and occasional surgeon with a maximum of practical advice in a minimum of space. In this it succeeds admirably and apart from minor errors, it is difficult to see what improvement could be made.

The illustration of adhesive strapping for an umbilical hernia on page 137 looks an insecure method, whereas that shown on page 44 is much more satisfactory for this condition. The statement

that catgut can be obtained in 12 sizes, from six 0 is contrary to the new standards which have now found acceptance with the manufacturers. A useful addition would be a table showing the comparative sizes of catgut, silk and thread.

Hernia and its treatment by operation can hardly be justified as minor surgery, nor is the inclusion of a description of major anaesthesia really necessary. Femoral vein thrombosis is usually treated with anticoagulants and early movements; the use of sandbags for four weeks should be a thing of the past. On page 397 Luerlok is wrongly spelt. No mention of amethocaine is made in local analgesia.

These are only small items whose correction no doubt will be carried out in the next edition, the appearance of which can be safely predicted.

S.F.T.

ESSENTIALS OF FEVERS

By G. E. BREEN, M.D., D.P.H., D.O.M.S. 2nd Edition. E. & S. Livingstone Ltd., Edinburgh. 1948. Octavo. Pp. xi + 351. 16 coloured plates. Price 15s.

The book gives the practice observed by the author in the L.C.C. fever hospitals of which he has been in charge. It is to be recommended for the undergraduate and will be very useful to resident housemen. The coloured plates are from Dr. Breen's own hands. The good ones have the great advantage of drawings over photographs in that the essentials are well brought out as, for example, in the picture of Koplik's spots (though the coated tongue referred to in the text is not shown in the picture).

There are a few misprints, but the abbreviations Hg and Bi have no place in a textbook for the words mercury and bismuth. Gamma globulin is much more than twice as potent as convalescent measles serum.

The use of penicillin in scarlet fever is not mentioned, though in Denmark this has reduced hospitalization to ten days and likewise the complications. The clinical diagnosis of pertussis should be given greater emphasis and the pernasal swab described. The Waterhouse-Friderichsen syndrome can sometimes be recognized clinically, and on occasions the patient may survive with energetic treatment started without delays. In introducing the subject of diphtheria, more should be made of the fact that this is an illness against which we have really adequate protective measures. The story of the fall in diphtheria since 1941, when the Ministry of Health's campaign started is dramatic and worth describing.

Finally, it is wrong to forbid the picking up of babies by their attendants. Small babies need this type of attention. The suggestion on what to say to the parents of a child with diphtheria is a practical and kind idea of the author.

R.C.MacK.