simple and practical language which makes understandable, the functional significance of the tissues.

The chapter dealing with the preparation of tissues will be appreciated greatly by the student. Blood clotting is again written with interest and the further chapters dealing with blood and tissue fluids cannot but convey a clear and concise picture to the reader.

The illustrations throughout are clear and produce valuable matter. This book is really good and deserves special recommendation.

‡E. & S. Livingstone Ltd., Teviot Place, Edinburgh. Price 15/- Postage, 6d. home.

## A New Catalogue.

The house of E. & S. Livingstone have just published a fine illustrated revised catalogue of their Medical, Surgical, Nursing, Dental and Scientific books, a copy of which they will gladly forward to anyone applying to 16 & 18, Teviot Place, Edinburgh, 1, or Ludgate House, 107, Fleet Street, London, E.C.4.

### Letters to the Editor.

Whilst cordially inviting communications upon all subjects for these columns, we wish it to be distinctly understood that we do not IN ANY WAY hold ourselves responsible for the opinions expressed by our correspondents.

### PURLEY, SURREY. May 3rd, 1950.

DEAR MADAM,

With reference to the article by A. E. Hopkins in last month's issue of your journal I should be glad if precise information could be given as to the exact quantity of grape juice, which should be given in relation to the amount of milk. As grape juice is probably mainly fructose, could not its isomer glucose be as useful. As glucose is obtainable as a powder and so can be exactly measured it might be less difficult to handle than grape juice. Presumably also the fructose content of different types of grapes would be different. I should therefore be glad if the author could give more precise information on the use of grape and fig juices as a sweetening agent in babies bottles.

## Yours faithfully,

HELEN NEWMAN (Mrs.).

Grape juice can be introduced into the feeding regime after the second week by adding to it diluted cow's milk or using it after each feed, starting with very small quantities and increasing gradually.

The guide to quantity is indicated by the reactions of the child and only the mother, nurse or doctor can deduce these, by actual observation.

Commercially produced glucose is easy to handle, to measure, and is labour saving, but that inherent quality in fresh fruit juice which cleans the food tract, puts sparkle into the eyes, the pink of health into the skin and produces the chuckle of a healthy contented baby cannot be repro-duced artificially by any known method.

Fresh grape juice and strained stewed fig juice are not used for sweetening purposes but for the values of their natural sugars which assist in the tolerance of artificial food.

Glucose, sucrose and fructose are found in most ripe fruits, but the variation in the fruit sugars from different types of grapes is infinitesimal when compared with the great differences between milks from different breeds of cattle, so it should be emphasised that whilst great care should be exercised when using cow's milk for baby feeding, a casual glance will indicate whether fruit is ripe and sound. This means that juice from suitable fruit is always beneficial and safe whilst milk can be a source of trouble. Further, unsound fruit is obvious to even unskilled eyes, but dangerous milk looks the same as good milk to any eye. A.E.H.

## The Midwife.

# Injuries of the Genital Canal.

By J. C. Cuthbert, M.B., Ch.B., M.R.C.O.G.

A. Rupture of the Uterus.

- Causes are various. DEGENERATIVE WEAKNESS UTERINE WALL. Chiefly in multiparæ, and associated with lax abdominal muscles.
  - RUPTURE THROUGH A CAESAREAN SCAR, usually through a Classical Cæsarean section scar when it may occur during pregnancy or during labour, but has also occurred through a lower segment scar when it invariably does so during labour.
  - RUPTURE ASSOCIATED WITH ACCIDENTAL HAEMORRHAGE, more particularly with the concealed variety, when the uterine wall becomes extensively infiltrated with blood.
  - FORCIBLE UTERINE CONTRACTIONS in the absence of gross obstruction, may occur spontaneously or may be initiated by the administration of pituitary extract. OBSTRUCTED LABOUR associated with excessive thinning
  - of the lower uterine segment.
  - OPERATIVE RUPTURE specially liable to occur during two manipulations. Firstly, internal version carried out in a firmly retracted uterus. Secondly, traction by forceps through an insufficiently dilated cervix.

#### B. Rupture of the Cervix.

Uusually occurs on left side and, when extensive, may extend into corresponding lateral vault, or upwards along side of uterus.

The lesser degrees are particularly associated with premature rupture of the membranes so that the cervix has to be dilated by the foctal head, and even more so by the rapid passage of the head in precipitate labour.

The more severe degrees are produced by manipulative or instrumental interference which cause rapid dilatation of the cervical canal and, of these, traction by the forceps through an insufficiently dilated os is the commonest.

There is a very rare ring-shaped or annular rupture in which the whole of the thinned out cervix is completely torn off. Most of the recorded cases have occurred spontaneously but some have resulted from faulty technique in application of forceps.

### C. Avulsion of the Uterus."

Has been recorded many times.

In most cases the uterus has ruptured either spontaneously or as a result of operative interference, but the accident has been unrecognised. The hand then being introduced through the rent in the uterus, the body of the uterus has been mistaken for the mass of the placenta and torn from its attachments.

Also sometimes occurs during attempted removal of an adherent placenta.

### D. Rupture of the Vagina.

May be a direct extension of a perineal rupture, or again an extension from above of a cervical tear.

Bladder or rectum may be opened into, usually resulting in formation of vesico-vaginal or recto-vaginal fistulæ, as primary repair of bruised tissues is rarely successful.

Such ruptures rarely spontaneous, but nearly always the result of manipulation or instrumental interference, e.g., attempt to bring down a leg in an impacted breech presentation presentation, or rapid forcible delivery by forceps of a head through the vagina, or damage to tissues by fragments of sharp bone during extraction of fœtus after a craniotomy.



