the salinity. I found, however, that several of the wells on the slope of open ground above this esplanade were equally, or nearly equally, saline and nitrous, and the circumstances pointed to a large cemetery and several streets of houses on a higher level as the sources of the salinity. As the drainage of the town is of comparatively recent date, it may be imagined that the subsoil of the thickly inhabited parts is considerably contaminated by sewage. The wells in contaminated ground usually yielded about 20 centigrammes of chlorides, 5 to 12 of sulphates, 8 to 14 of nitrates, out of a total of about 60 centigrammes of mineral solids per litre. The hardness ranged from 22 to 31 degrees centesimal ($1^\circ = 1$ centigramme per litre of calcium carbonate).

Returning to my Indian experience, I may mention that on the low Coromandel coast, where there is a comparatively scanty rainfall, wells near the seashore are frequently found to contain brackish water, while elsewhere conditions more favourable to washing out of salinity from the soil are accompanied by freedom from salinity, even though the wells be in very porous soil, and very near to the seashore. Thus on the western, or Malabar coast, the heavy rainfall has long ago washed all salinity out of the porous soil; wells near the shore, and dug down to the sea level (as evidenced by the sand at the bottom and the general level) yield water remarkably free from any salinity except that due to air-borne chlorides. The reason is, as I have said, that in every place where the rainfall is sufficient to wash the soil free of any original marine deposits, it will exercise a pressure sufficient to prevent all infiltration of sea water. Therefore, whenever the level of the subsoil water is above that of the sea, any salinity not due to sewage contamination must be ascribed to marine deposits or air-borne marine salts. Infiltration of sea water could only occur where the subsoil water was lowered by continuous draught. Could it, however, be produced by the pressure of high tides? I cannot answer the question positively, but I would venture to say that the fluctuating level of the sea could scarcely have effect at any considerable distance from high-water mark, and that high tides would only press back the water which low tides had drawn to the shore. The physical effect of the sea on the subsoil water of seaside places is then the same as that of other sheets of water, lakes, ponds, or rivers. Everywhere the level of the subsoil water is not below that of the sheet of water towards which it tends to flow. Apparent exceptions to this rule may occur where irregular cropping up of impervious strata dams the slope; but the rule here holds good as regards the underground sheet of water thus dammed up, though it may be a small supply, and soon exhausted. Where the sheet of water is the sea, the subsoil water can always be reached at a depth less than that of sea level, and less in proportion to the distance from the shore. And unless the subsoil water be exhausted by continuous heavy draught, in a well not far from the sea and sunk in very porous soil affected by tides, I do not think that infiltration of sea water can occur.

Palace-gardens-terrace, W.

IMPACTION IN THE LARYNX OF A FRAGMENT OF A BREAKFAST CUP.

TRACHEOTOMY; ARTIFICIAL RESPIRATION; RECOVERY.

By HENRY W. FREEMAN, F.R.C.S.I.,
SURGEON TO THE ROYAL UNITED HOSPITAL, BATH.

A LITTLE boy, aged seven, when eating his breakfast, which consisted of bread and milk, broke with his spoon a triangular piece of china out of the rim of the breakfast cup. It fell unnoticed into the cup, and was inadvertently swallowed with the soaked morsels of bread. Choking followed, and, sending for me immediately, I found the child suffering from frightful laryngeal spasm, stridor, spasmodic cough, and threatened asphyxia. I had no doubt the piece of china corresponding to the gap in the cup was lodged in the larynx. No time was lost in inverting the body and striking the back sharply, but the foreign body could not be moved. It could not be felt with the finger or by the aid of curved forceps. Tracheotomy was decided on, and sending for the nearest medical man, the late Mr. Biggs, we proceeded to give chloroform. Half a drachm was first given, and for three or four minutes the anæsthetic was well taken. On administering a second half drachm respiration suddenly ceased, and the

radial pulse disappeared. The trachea was opened immediately below the cricoid cartilage, and a double tube introduced. There was no intra-tracheal hæmorrhage. Silvester's mode of artificial respiration was then resorted to, alternating with Nélaton's mode of inversion, and after twenty minutes' steady perseverance, respiration was pretty well re-established, and the radial pulse had returned. The child was then wrapped in blankets, put to bed, and the steam spray kept going continuously. It was not deemed advisable to attempt for the moment any further mechanical interference. The foreign body, however, still remained in the larynx. Early on the following morning, having procured a piece of stiff copper wire, we bent half an inch of the end to a right angle, and withdrawing the tracheotomy tube, taking care to keep the section open with dressing forceps, the wire was introduced into the tracheal opening, and pushed steadily upwards until the chink of the china was heard, and, getting the bent portion at right angles to the foreign body, it was soon dislodged into the mouth and removed. The fragment removed measured seven-eighths of an inch in its longest diameter, was triangular in shape, corresponding to, and fitting, the gap in the cup. The boy made a good recovery.

Bath.

A Mirror

OF

HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

GREAT NORTHERN HOSPITAL.

A CASE OF LEFT POPLITEAL ANEURISM OCCURRING ABOUT FIFTEEN MONTHS AFTER THE CURE OF AN ANEURISM OF THE RIGHT FEMORAL; COMPRESSION OF FEMORAL WITH LIGATURE OF OX AORTA; CURE; REMARKS.

(Under the care of Mr. W. SPENCER WATSON.)

FOR the report of the following case we are indebted to Mr. Ashwell, house-surgeon.

Philip E—, aged thirty-five, with good family history, was admitted on June 15th, 1883. Previously he had had slight attacks of subacute rheumatism. He had not had syphilis, but gonorrhœa twice; had been used to taking a good deal of beer and spirits. In the early part of the year 1882 he was in this hospital for aneurism of the right femoral artery in Hunter's canal. The artery was tied in Scarpa's triangle with the ox aorta, and the wound healed in ten days, with complete cure of the aneurism.¹ About a month before the present admission he first noticed beating in the left popliteal space. He took no notice of it for fourteen days, when it began to be painful, and the leg began to swell. The swelling was gradually increasing in size up to his admission.

On admission, patient was a fairly nourished man, with dark hair; no cough; heart sounds normal; pulse regular, 68; slight rachitic curvature of tibiæ. There was an expansive pulsating swelling in the left popliteal space, larger on the inner than on the outer side, and movable on the bone. There was a bruit to be heard over the tumour, and pressure on the femoral artery above completely stopped pulsation; there was a good deal of swelling and œdema of the leg. The measurement over the most prominent part of the tumour was $14\frac{3}{4}$ inches. On the 18th pressure by means of two tourniquets was tried, but the patient was not able to bear the instrument more than five minutes at a time. On the 20th the femoral artery was tied in Scarpa's triangle, the ox aorta being again used as a ligature. The spray was used when the operation was half over and the wound dressed antiseptically; pulsation completely stopped in tumour. At 5.45 the patient had one quarter of a grain of morphia subcutaneously; at 11.30 also one-sixth of a grain. Temperature 99.8° .—21st: Very fair night. No sickness after operation. Good deal of pain in the leg; the leg wrapped in wool, toes rather cold. Morning tempera-

¹ Vide Report in THE LANCET, June 10th, 1882.