

liquid coloured with methylene blue to the amount of more than a pint could be swallowed and yet could not be recovered through the gastrostomy wound. It turned out afterwards, of course, that the blue liquid swallowed remained in the oesophagus and never entered the stomach at all, as it would after a short interval be returned by an act of easy vomiting, or regurgitation.

In March, 1901, I made an opening parallel with the margin of the costal cartilages on the left side, through the rectus muscle, and entered the abdomen. By means of a sound passed through the gastrostomy wound, I very quickly found that my diagnosis of hour-glass contraction of the stomach was an error, and that the sac which contained the fluid was situated above the diaphragm. The oesophageal bougie passed by the mouth under an anaesthetic, could not be felt with the fingers in the abdomen outside the stomach. Accordingly a small opening was made in the stomach and the finger introduced. The stomach wall felt smooth, and it was only after a prolonged search that the oesophageal opening was found. It seemed to lie close to the aorta, rather to its right side, and was so small that only the tip of the index finger could be made to enter it. With the finger in that position the aorta seemed to be beating directly against its left side, and gave me the impression that the oesophagus passed through the same opening in the diaphragm as the aorta but to the right of that vessel. This was subsequently disproved so far as the common opening was concerned, by post mortem examination, as it was found that the right crus of the diaphragm passed between these two tubes in the normal manner, but that the oesophageal opening had been dragged quite to the right of the middle line by the weight of the oesophageal sac pouching into the right pleural cavity.

An oesophageal bougie was now passed by the mouth, but could not be felt to come in contact with the finger in the cardiac opening of the oesophagus. On withdrawing the finger from this opening, however, and exploring the neighborhood, the end of the bougie could be felt distinctly to the right of this opening through the stomach wall and the diaphragm. After considerable manipulation the bougie was directed towards the oesophageal opening, and passed on into the stomach. The bougie was now directed by the finger across the stomach cavity towards the gastrostomy wound and made to emerge there. A silk thread was tied to it, and to this in turn a length of small rubber tubing, which was thus withdrawn across the stomach through the cardiac opening and so upwards to the mouth. My intention was to endeavour to dilate the stricture by slow traction by means of this rubber tube, adopting to some extent the string-saw method of Abbe.

The operation wound in the stomach was now stitched up by a double row of Lembert sutures, the stomach dropped back, and the abdominal wound closed after disinfection, without drainage.