

wound had healed by first intention, but we reluctantly tore it open down to the œsophagus. On careful examination no bleeding vessel could be found; the hæmorrhage had evidently ceased spontaneously, but the inferior thyroid which had been divided near the wound in the œsophagus was found and ligatured with silk. The wound was again closed with sutures.

At 6 a.m. Saturday the pulse was 132, temperature 100.4 F. Whiskey was added to the enemata of milk. He vomited a little blood twice during the day, but was in better condition in the evening than in the morning, his pulse having fallen to 100 and his temperature to 98° F.

He passed a comfortable night, and on Sunday morning his pulse and temperature remained the same as on the evening before. The injections of milk and whiskey were continued. In the forenoon he took several swallows of tea mixed with cream, a portion of which escaped through the wound.

About noon a profuse hæmorrhage from the wound occurred. Dr. Dent again administered chloroform, and I again opened the wound. The hæmorrhage was so profuse that it was very difficult to find its source. By seizing the tissues both above and below the point from which the hæmorrhage came with Tait's scissor-forceps and drawing them partly out of the wound, I discovered the bleeding vessel, seized it with the common artery forceps, and ligatured it securely with silk. The wound was then left open.

At this time the patient was exceedingly weak, his pulse being 150 and scarcely perceptible. He had taken no nourishment by the stomach for one week, had been anæsthetized five times during that week, had suffered much pain and had lost a great deal of blood. We decided to practice transfusion to save him if possible. We quickly procured a piece of rubber tubing, to one end of which we attached a funnel and to the other a large aspirator needle. I exposed the radial vein just above the wrist (those higher up could not be seen), introduced the needle into it, the tube and needle having been filled, and into the funnel, held four feet above the level of the arm, Dr. Dent poured a pint and a half of warm water containing 75 grains of chloride of sodium, 37½ grains of carbonate of sodium.

A decided increase in volume of the pulse was

immediately perceptible, and the profound depression soon began to disappear. Four hours after the transfusion the pulse was 120, moderately full and strong, and the patient expressed himself as feeling stronger.

Enemata of milk were continued, but at no time since they were begun did they seem to afford him much nourishment, as he did not retain them long. During the whole time, even when the injections were suspended, he had frequent desire to go to stool. When allowed to get up he would sit and strain as long as the nurse would permit.

On Monday his pulse was 110, temperature normal, tongue dry. Had had a restless night. Was given small doses of calomel and morphine, which produced quiet sleep, and on Tuesday caused the bowels to move several times. The discharges consisted of a dark, reddish, grumous material, which was doubtless chiefly blood which had passed through the intestinal canal. The pulse now ranged from 120 to 130 and the temperature from 97° to 98° F. The patient was now required to take a half glass of milk every three hours. The act of swallowing was accompanied by a great deal of pain, and a portion of the milk escaped from the external wound, so that the patient, although hungry and thirsty, almost rebelled against our orders. There seemed also to be a paralytic condition of the pharyngeal muscles, for a portion of the milk was expelled through the nose. This latter complication existed for but one day.

On Wednesday, the seventh day after the operation, the patient took milk freely, and ate ice cream. Probably one-fourth of what he swallowed escaped through the wound in the neck.

From this time on, recovery progressed without any interruption. About one month from the date of the operation the wound had entirely healed. The prisoner gained flesh and strength rapidly, and is now in much better condition than he was before he swallowed the glass, for one week ago he escaped gaol in broad daylight, distanced all of his pursuers, and has since escaped capture.

The recorded cases of œsophagotomy, according to Ashurst, number 65 with 52 recoveries. Poulet says that œsophagotomy for the removal of foreign bodies has been practiced about 40 times, but does not give the results. Aitkin, according to J. Kelly Barton, of Dublin, in an article in the *Annals of Surgery*, Vol. vi., No. i., July 1887,