lapsed, and it was only by means of hot bottles, blankets, enemata of beef-tea and brandy, and very assiduous attention that he could be rallied.

He was then kept under the influence of opium, in pills containing one-third of a grain, when he could swallow, and hypodermic injections when he could not.

January 30th. He had passed a good night. The bowels were moved at 9.30 A.M. There was some vomiting. The temperature had gone up to 103°. There was still coldness of the extremities and some degree of collapse, from which the patient never rallied, but died at 9 P.M. the same evening.

No *post mortem* examination was allowed.

TWO CASES OF COLOTOMY: WITH REMARKS.*

By JOHN WALTERS, M.B.

CASE I.—Mrs. S., aged 61, was admitted into the Reigate and Redhill Cottage Hospital on November 25th, 1878, with cancer of the lower end of the rectum, commencing about an inch above the anus, and involving the whole circumference of the gut and the posterior wall of the vagina. The consequent stricture only admitted the point of the little finger. She suffered a good deal of pain, but her chief trouble was from constipation and pain during and after action of the bowels. As removal of the disease was out of the question, and the only prospect of relief was that offered by colotomy, this operation was performed in the left loin a few days after admission. By following Allingham's directions, no difficulty was experienced in finding and securing the gut; there was free oozing from the wound, but no arterial bleeding; a pad was placed over each end of the wound, and an elastic bandage round the body. She had little or no constitutional disturbance after the operation, and was much relieved by it. The oozing still continuing, it was kept in check by injections of a weak solution of perchloride of iron and by pressure; means were also taken to improve her general health by tonics and good diet. Turpentine could not be borne. The hæmorrhage at last ceased, and the wound closed up. She was discharged on February 7th, 1879, in a fairly satisfactory condition, though, of course, still suffering from her original disease. After the operation, it was ascertained that she was a bleeder, and was subject to considerable bleedings from slight causes. I have lately heard that she remains free from any great discomfort, but that the cancer is making rapid progress.

CASE II.—E. F., a single woman aged 62, was admitted into the hospital on November 9th, 1878, under the care of Dr. Flood and myself, suffering from constipation, abdominal pains, and occasional vomiting. The abdomen was distended, and everywhere tympanitic. No tumour could be anywhere discovered; there was no particular tenderness on pressure, and no pyrexia. The distension chiefly followed the course of the colon. The history was that of gradually increasing abdominal discomfort and constipation, only relieved by strong aperients. She was fairly nourished, and not cachectic. Soothing treatment was first adopted, poultices to the abdomen, belladonna administered freely and applied externally; afterwards she was kept under the influence of opium, the lower bowel being kept empty by enemata administered with the long tube. Temporary relief only was obtained by these means and by the adoption of a light nourishing diet of milk, eggs, and beef-tea, etc.; after the bowels were relieved, she would remain tolerably well for a few days; then the abdominal swelling, pain, and sickness would return. She was never sick, unless there had been constipation for some time. At no time could she retain much fluid in the bowel, even when the injections were carefully given with the long tube. On two or three occasions, a small quantity of blood was noticed in the stools, but only after the use of the long enema-tube. Sometimes, the evacuations were not larger than the little finger; at others, large bulky motions would be passed. On two occasions, consultations were held with other medical men attending the hospital, to discuss the question of performing colotomy. The patient was on each occasion placed fully under the influence of ether, and attempts were made to introduce the hand into the rectum. These were only partially successful, owing to the rigidity of the parts; and no positive evidence of obstruction being obtained, it was determined to delay operative interference. She was then put on strychnia and mild aloetic aperients administered, galvanism being also applied to the abdomen externally, it being suggested that the constipation was due to weakness of the muscles of the intestinal walls. These measures failed to give relief, and the patient's health and general condition gradually deteriorated. Subsequently, most relief was obtained from a pill containing extract of

aloes and belladonna, and the occasional use of enemata. On January 31st, 1879, the patient's condition had become very critical; the abdomen was much distended and tympanitic; she was frequently sick; and no relief could be obtained from the bowels; there was no fecal vomiting. On this day, I performed left lumbar colotomy. As in the former case, no difficulty was experienced in finding the bowel, which was exposed at its posterior part, opened, and stitched to the edges of the wound; it was found to be very much hypertrophied. While this was being done, the patient retched violently, causing the peritoneum to give way and a coil of intestine to protrude from the anterior part of the wound. This was immediately covered with warm sponges by my friend and partner, Mr. Berridge, who was assisting, cleansed from the feculent matter it had acquired by contact with the open colon, and returned. The wound was then closed with silver-wire sutures, a pad applied to each end of it, and an elastic bandage fastened round the body. After the operation, she was kept moderately under the influence of opium, and the urine was regularly drawn off. She had no more sickness, and expressed herself much relieved. There was no free discharge of feces from the artificial anus. The temperature rose once only to 100°, and the pulse to 120. A week after the operation, cystitis came on. This was treated by washing out the bladder with diluted Condy's fluid, and subsequently with a solution of quinine and diluted nitric acid. Benzoate of ammonia, with buchu, was given internally, and her strength was well supported. In spite of this, the symptoms increased; she became more and more exhausted, and died on February 7th, five weeks after the operation, the wound having quite healed. A *post mortem* examination revealed an annular scirrhus stricture at the junction of the sigmoid flexure and rectum. There was no trace of peritonitis to be found. The interior of the bladder was intensely inflamed, almost gangrenous.

These two cases illustrate the most common forms of intestinal obstruction for the relief of which colotomy is available. In the second case, I expressed from the first my opinion that there was an obstruction, probably cancerous, at or about the sigmoid flexure, basing my opinion on the age and sex of the patient; the gradual increase of intestinal obstruction; the uniform abdominal distension, especially following the course of the colon; the late occurrence of vomiting, and the small amount of fluid the patient was able to retain injected *per rectum*. In stricture in this region, no positive reliance can be placed on the size of the stools; fecal matter may dribble through a stricture situated high up in the rectum as this was, accumulate in the lower part of the bowel, and be discharged in a large mass. Colotomy is not in itself a dangerous operation; it may be readily performed by any surgeon acquainted with the anatomy of the parts and accustomed to perform surgical operations. The danger is in delaying its performance too long, as I fear was done in my second case. In any case where the diagnosis is sufficiently clear, I would earnestly advise its performance before dangerous symptoms appear, or the patient has become too exhausted to permit of recovery. In some obscure cases, it may be desirable to perform laparotomy in preference; but it is not my object now to discuss this operation.

In both these cases, the operation was commenced under ether, and finished under chloroform, the former anæsthetic causing so much cough that it had to be discontinued. I have found the same trouble when ether has been administered for the performance of herniotomy. I may add that I have now had occasion to perform colotomy five times for malignant disease of the sigmoid flexure or rectum, and in no case has its performance hastened the patient's end; in one, the patient was almost moribund before it was performed, death ensuing on the following day; in the other four, the patients' sufferings were markedly relieved, and their lives undoubtedly prolonged. My only regret has been that in some of them I delayed its performance too long.

QUEEN'S COLLEGE, BELFAST.—The following obtained prizes during the past winter session in the Faculty of Medicine, the names being arranged according to merit. *Medicine*: First Year—James Simpson, S. H. Shaw, John Dodd, J. C. Bodkin; Second Year—John Acheson. *Surgery*: J. P. McGeagh, John Vint, R. T. McGeagh, S. H. Shaw, J. C. Bodkin, J. A. Cunningham. *Materia Medica*: Thomas Sinclair, William Nelson, James Gillespie, James Pinkerton, Samuel Connor. *Chemistry*: James Chambers, J. J. Austin, R. H. Mathews, J. W. Beatty, and C. Bell (equal). *Anatomy and Physiology*: First Year—John Kennedy, J. G. Bell, H. C. Cooke, J. J. Austin, C. B. St. George; Second Year—Thomas Sinclair, James Pinkerton, William Nelson, Samuel Connor, W. R. Hamilton; Third Year—J. C. Bodkin, R. T. McGeagh. *Practical Anatomy*: First Year—C. B. St. George, J. J. Austin, R. H. Mathews, Thomas Cromie, S. S. Swan; Second Year—Thomas Sinclair, K. J. McCormick, M. McMurray, John Logan, W. R. Hamilton, William Nelson; Third Year—J. C. Bodkin, J. S. Collins, R. T. McGeagh, D. Forsyth.

* Read before the West Surrey District of the South-Eastern Branch.