diately. I suggested that the man should not be allowed to leave the house, but that a bed should be made for him, and that he should go to bed at once. This suggestion was acted upon, and it was decided that he should remain in the house and be properly nursed until all dangerous symptoms had passed. I was compelled to leave for a time, but a friend promised to remain during my absence. At 4 P.M., I saw him again, and found the vomiting had been very great; but the most prominent and distressing symptom had been violent and frequently recurring cramps of the legs, relieved by forcible extension. His pulse was small, 108 to 114. He complained of pain when pressure was made over the epigastrium. He was dosing and very drowsy. At 9 P.M., he was still drowsy, perspiring profusely. The pulse was about 90, fuller and softer than at 4 o'clock. He had pain in the epigastrium.

May 13th, 8.30 A.M. He had passed a good night and felt much better. He was in no pain unless pressure were made over the epigastrium. When asked, he complained of the bowels feeling sore. Pulse soft and not so quick as last night.—2.30 P.M. The pain in the epigastrium was very slight. He now stated that he had had this pain, together with severe purging, for some weeks past; that it was better now than it had been for some days.—11 P.M. He was doing well; perspired freely. The pulse was 72, full and soft; tongue white. He was in no pain. He said that he had during the day a slight pricking pain in the bowels. The bowels had acted once during the day. There was no vomiting.

He now gave the following history. He came to Bath in December 1847, and was then in good health. Three months later, he was taken ill with swelling of the testicle; but, a fortnight before this came on, he had a severe purging, the bowels acting four or five times daily, sometimes oftener. He took no notice of the purging or swelling of the testicle until the latter became so large that he was obliged to give up his work as an ostler. He then applied to the late Mr. Haines, who gave him medicine and advised him to go to the hospital. He was an in-patient at the hospital from March 15th for one week under the care of the late Mr. Norman. He was relieved and went home, when the purging returned, frequently seven or eight times in the day, and this continued to the time of taking the antimony.

May 15th. He had passed a good night. He felt quite well, with the exception of weakness. He was in good spirits. The bowels had acted once; the motion was healthy. The tongue was coated with a yellowish brown fur. There was no thirst; the skin was covered with sweat. Pulse 60. He was ordered to take decoction of cinchona with sulphuric acid three times in the day.

On May 18th, he returned to work.

CASE OF PENETRATING GUNSHOT-WOUND OF THE ABDOMEN.

By J. D. CROWE, L.K.Q.C.P., Surgeon Army Medical Department.

ON January 3rd, 1876, a young soldier belonging to the battery of artillery in my charge was wounded by the accidental discharge of a fowling-piece carried by his comrade. I saw the patient immediately on his being carried into camp, about half an hour after the receipt of the injury. He was then suffering from shock, but not in a very marked degree. His face was pale and anxious; his body cool (not cold), and sweating. Pulse slow, but fairly strong. He was craving for water. It was found that the charge had struck the abdomen to the left of the mesial line, the wounds of the shots covering an oval space which measured vertically six inches and horizontally five inches. The bulk of the charge entered above the level of the umbilicus. The shots were tolerably fairly scattered over the space, but in a few places they had entered in clusters of four or five grains, close together, thus making larger wounds than those caused by the single grains. The number of shot-wounds was about one hundred and sixty; the greater number of the shots could be felt under the skin, but not in those places where they had penetrated in groups. The man complained of stinging and burning pain at the seat of the injury. There was no external bleeding. Water-dressing was applied to the wounded part, some brandy and aromatic spirits of ammonia were administered, and after about half an hour he had one grain of opium, which was repeated in two hours. A warm linseed-meal poultice was placed over the wound at bedtime. He slept fairly well, and passed urine once during the night.

January 4th. The battery marched for the next camping-place at 4 A.M., the wounded man, in charge of the apothecary, being carried in a dooley. Before starting, he had some coffee and one grain of opium. When within about a mile of the camp, his bowels acted, and

I am informed by the apothecary that the motion consisted almost entirely of black altered blood, showing that the intestinal canal had been wounded. I saw the patient immediately on his arrival in camp, and found him looking pale and exhausted. He was given one grain of opium, and was able to eat some food. At 12 noon he passed a large quantity of black tarry-coloured blood streaked with bright red blood. The opium was then repeated, and a bran poultice applied over the abdomen. In the afternoon, he was sent forward to the next stage in charge of the apothecary, with orders to be carried slowly and carefully, and to have the opium repeated twice, viz., one grain on the march and one at bedtime.

On the morning of January 5th, on my arrival in camp, the apothecary reported that the patient travelled comfortably and rested well during the night. The bowels had not been moved. His diet consisted of milk, rice, and arrowroot, and a little soup once a day. He had three grains of opium during the day. The battery halted at this stage until the morning of the 7th.

On January 6th, he had passed a quiet night with several hours' sleep. There was some tenderness over the lower portion of the abdomen, with tympanites, but no constitutional disturbance; pulse quiet, tongue clean; appetite fairly good. He was ordered to have a grain of opium every fourth hour. The bran poultice was repeated. There was no motion of the bowels during the day.

January 7th. The patient slept well during the night. He was carefully carried to the next camp, having had a grain of opium before starting. He complained of headache during the day; probably due to the opium. His pupils, however, were not contracted, and his condition generally was very satisfactory. At 3 P.M., he had a motion of the bowels, consisting of firm faeces slightly coated with black blood. From this date the dejections were perfectly normal, and the man made a good recovery. A considerable number of shots came away from time to time in the poultices, but many of them may still be felt beneath the skin.

The remarkable points of the case appear to me to be these: 1. The wounded man was only four or five paces from the muzzle of the gun when it exploded; 2. The weapon was loaded with full charges of powder and shot (No. 6); the wadding, however, used, was some raw cotton which the men had picked in the fields through which they passed; 3. The entire charge of shot struck the man's abdomen, not in a close compact body as one would have expected, considering the very short distance at which the gun was fired, but scattered over a tolerably large space.

The scattering of the shots, I think, may be explained by the fact of the soft cotton which was used as wadding not confining the charge tightly in the barrel. The power of penetration was also lessened by the same circumstance, and by the fact of the charge having passed through a number of articles of clothing worn by the man before it struck his body. These were a white cotton coat, ditto trousers, a cotton shirt, flannel shirt, and thick flannel cholera-belt; in addition to which, many of the shots passed through some of the cotton (which was used as gun-wadding) carried by the man between his two shirts at the time of the accident.

REMOVAL OF TRACHEOTOMY-TUBES.

IN the JOURNAL for May 26th, I observe, in the report of the meeting of the Royal Medical and Chirurgical Society on May 8th, 1877, an account of a case in which the cylindrical part of a tracheotomy-tube had dropped into the left bronchus. The difficulties, dangers, and delay which were encountered in the various attempts to remove it arose chiefly from an erroneous conception of the principle on which the extracting power should be applied in such cases. The copper wire is apt to hitch into the bronchial mucous membrane and bring up, as it did in the case referred to, "a large clot of blood". On the other hand, if the blades of every possible form of forceps be not equally applied on both sides of the tube when an attempt at extraction is made, the inevitable result will be to impact it more firmly. Several years ago, Professor Spence, in a case of a similar kind, discovered the true principle on which such foreign bodies should be extracted, and which, for simplicity, speed, and safety, cannot be excelled. The blades of an ordinary pair of pharyngeal forceps are introduced closed; and, acting as a probe, discover the situation of the tube. They are then passed into the lumen, firmly expanded, and equal pressure being thus established, the instrument is withdrawn, carrying the tube with it (see Spence's *Lectures*, vol. ii, p. 887). Mr. Spence, in his admirable address to the British Medical Association in Edinburgh two years ago, alluded to this plan, which, however, requires to be reiterated.

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