RECOLLECTIONS OF WORK IN AN AMBULANCE

By WILLIAM MAC CORMAC, F.R.C.S., Surgeon to the General Hospital, Belfast.

V.

September 6th.—There is nothing very eventful to remark of this day. Some of us paid a visit to the camp of French prisoners, of which so much has been said in the papers. At least 100,000 men were confined in an island, formed by a canal and a branch of the Meuse, but few of them had any cover, and food of every kind was exceedingly scarce. It had been raining for several days, and the ground was churned into mud ankle deep. At every step men, seeing our red crosses, would stop us, say they were very sick, and beg to be taken to hospital. They looked what they said, poor fellows; but we could do nothing. The colonel of the 4th Chasseurs d'Afrique, the Marquis de Galifet, asked if I could give him some quinine, as he was then suffering from an accession of African fever. He was out in the drenching rain like the rest, protected only to a certain extent by the hood of a rude *char à banc*. I gave him the quinine, and he begged me, in return, to accept his Arab horse. It is a beautiful animal, and I brought it home with me. It served me, when in Sedan, in place of my own horse, a very good one, which I had brought from Paris, and which was stolen from me. It was difficult to feed him, as fodder was almost unobtainable, and his daily dinner consisted for some time of the fragments of stale bread from the wards.

September 8th.—I find I have mentioned in my diary that even up till this day large numbers of dead horses lay unburied, and that it would be several days before all could be put under ground. A great many also had to be killed and thrown into the river. There was no food for the unfortunate beasts, many of whom, like their masters, had been severely wounded. To-day, for the first time, we got our boots cleaned, and towels to dry our faces after washing—luxuries to which we were previously quite unaccustomed, and which we appreciated accordingly.

On the 9th, 10th, and 11th of September, 102 new patients were sent to us from different minor ambulances. All were cases of very serious injury, and many had been previously submitted to amputation on the field. This influx of patients overcrowded us a good deal, and we were most anxious to get tents into which we could put any cases of fever or of erysipelas which might arise, or those threatened with pyæmia, or cases likely otherwise to poison the hospital atmosphere, so as thus to relieve the wards. Of course there were many amongst these new cases which required operation. There were cases of injury so severe that one could scarcely understand any attempt whatever being made to save the limb. I suppose it was everywhere else the same as it was with us, far too much work for the surgeons to do; for instance, in the following example.

CASE XXIX.—Guerieri, 4th Marines, wounded on September 1st in three places, was admitted to Asfeld on September 10th. A ball had traversed the right thigh without injuring the bone. The left tibia was extensively smashed, and so was the upper part of the left femur, close to the trochanters. He was in a very weak exhausted state. It was evident from the moment we first saw him that it was hopeless to attempt to save the limb; but his condition was not such as to warrant immediate interference. He was accordingly carefully tended and fed; and on the 18th, when he had made a considerable rally, it was decided to afford him the only chance he had, that of disarticulation at the joint. The operation was performed in the usual manner with a long anterior flap, and the femoral and other arteries were twisted. The poor fellow died very shortly afterwards. He never rallied from the effects of the shock; and I think that the amount of chloroform he took had a large share in the rapidity of the fatal issue. In no operation, perhaps, does the administration of chloroform demand greater carefulness than in this one.

CASE XXX.—The only other instance of disarticulation at the hip at Asfeld was operated upon on the 10th. The upper and back part of the left thigh, as well as a great portion of the outer side of the limb, had been carried away by a shell-explosion, which tore off a considerable portion of the left buttock as well. As the bone was uninjured, as well as the main vessels, an unsuccessful attempt was made to preserve the limb, or at all events to avoid immediate amputation at the joint, a procedure so uniformly fatal. This, however, failing, the operation became necessary on the 15th September. The flap required to be made of unusual length, and was taken from the inner aspect of the limb, as the soft parts on the outer and back part of the thigh were almost completely removed. The after-shock was considerable; but the administration of brandy and beef-tea after some time produced a good reaction. The man was placed in a tent by himself, with a special attendant, and un-

der the particular charge of Dr. Nicholl, who was most assiduous in his care of him. On the next day, the patient's condition was excellent, the pulse 120, and pretty strong; he had slept and eaten well. For five days I felt quite sanguine as to his ultimate recovery. Each day he appeared stronger and better. On making my evening visit on the sixth day, I found Liprendé, for that was his name, weak and exhausted. He said that the attendant had neglected him all day, and that he had got neither food nor wine. It was, unfortunately, too true. The rascally *infirmier* tired of his work and bolted, leaving his unfortunate patient to take care of himself. He had been seen two or three times during the day, but, as he made no complaints except to me in the evening, the neglect was not discovered till too late to remedy. I do not say that the patient would otherwise have eventually recovered, but there was everything about him and his condition to make us hope and expect that he would do so. He died, however, during the course of that night.

Four cases of resection of the elbow-joint were admitted on the 10th. One of them had been only partial, and proved fatal. In another, amputation had to be immediately performed. The joint had been cut out through a transverse incision across the posterior aspect. There was no attempt at union, and the wound was a large hole into which one night almost put a closed fist. The fore-arm was only attached to the arm by a narrow isthmus of skin and muscle in front. We had several other cases of resection of the elbow, which had been performed outside in this manner—that is, by a transverse in place of a longitudinal incision. The men told us that they had been operated upon by German surgeons, but the method adopted is one which would find little favour in this country. A few cases of injury of the spine were admitted about this date, of one or two of which I may give particulars.

CASE XXXI.—Jean Pujolle, farrier in the 5th Cuirassiers, was wounded in two places on the 1st September. He had received a flesh-wound, caused by a fragment of shell, in the right arm, and his neck was traversed by a ball, which, entering opposite the anterior edge of the left sterno-mastoid, at the mid-point of the muscle, emerged a little to the right side of the fifth cervical vertebra. On his admission, nearly a fortnight after the injury, we found the body almost completely paralysed, from the chest downwards. The respiration was abdominal, the cheeks were flushed, the countenance exceedingly anxious, and the bronchial tubes partially choked with mucus, which was only imperfectly expectorated. The pulse was 110. Both arms were completely paralysed. There was not a trace of power of motion in either. The left leg was also completely paralysed, but there was slight power of voluntary motion in the right leg. We found, however, sensation almost perfect in the left leg, while there was none in the right; and we found complete sensibility to touch in the right arm, while the left was quite anæsthetic. Reflex action could be excited in the paralysed leg. The patient passed both urine and fæces involuntarily. Frequently he cried out on account of pains in his limbs, and the slightest movement in bed caused him great agony. The temperature was usually very high. In this helpless condition this poor creature lingered on. Each day we hoped death would rid him of his great suffering. Bed-sores formed of course; but his general condition remained throughout pretty much as I have described it. I expected before I left to have had an opportunity of performing what must have proved a most interesting autopsy. The patient, however, did not give up the struggle till after I quitted Sedan. I transferred him, with a few others, to the care of the surgeons of a Dutch ambulance just arrived at Sedan, who faithfully promised they would make a *post mortem* examination and let me know the result. I fear it has not been done, since I have twice written on the subject and as yet received no reply.

CASE XXXII is somewhat remarkable in consequence of being an example of almost exactly similar injury. Bonnevey, wounded on the 1st, was also admitted on the 10th September. The ball entered through the upper part of the right sterno-mastoid muscle, and emerged two inches and a half to the left of the *vertebra prominens*. The right side was completely paralysed. He died the following day, and there was no leisure at this time for any *post mortem* examinations.

CASE XXXIII.—Pescher was shot in the region of the second lumbar vertebra; he was also one of the late admissions. A careful search was made for the ball, and it was found impacted in the body of the vertebra, having smashed the transverse processes. It had become, doubtless, altered a good deal in shape, for, though it could be seized by the forceps, no reasonable efforts sufficed to remove it. A few pieces of cloth were alone pulled out; and after a short time very profuse hæmorrhage occurred. The wound required to be plugged to arrest it, and the patient died the same afternoon—the day, in fact, he was admitted. This case illustrates one of the dangers attendant on meddling with bullets deeply lodged in the spine; and it shows that in some cases the extraction of a bullet, even with a good hold of it, is no simple

task. We had a few other cases of spinal injury, but it is unnecessary to mention any details concerning them.

The number of buttock-wounds which we had under treatment is sufficiently remarkable. They were of all shades of severity—some being slight flesh-wounds, caused by the grazing of a shell or piercing of a bullet, while in others the greater portion, or even the whole, of the glutei muscles had been carried away by the explosion of a shell, and the ilium or sacrum injured at the same time. We had in all about eighteen such cases; and if it be true, as is alleged, that the *Maréchal de Mac Mahon* was wounded in this region, it can be taken as no indication of want of bravery if a soldier should unfortunately be struck there.

CASE XXIV.—*Claude Sannier*, artilleryman, was struck by a piece of shell on September 1st. He was admitted to Asfeld twelve days afterwards. We then ascertained that almost the whole of the left ilium was exposed, as well as the upper part of the sacrum. The glutei muscles were, on the left side, completely stripped off the bone, and torn from their attachments throughout almost the entire length of the crest of the ilium. On the right side of the sacrum, the soft parts were also very much injured. The entire length of the wound was twelve inches, and it was six inches wide at its broadest part. In the bottom of it, a considerable portion of the sacrum was exposed, and almost the whole of the *dorsum ilii*, which was fissured in several directions. A portion of bone seven inches long and five inches wide was exposed, black and dead. The wound around looked healthy; the granulations were springing up at the edges. Some fragments of bone showed signs of beginning to loosen. The patient lay constantly upon his face. His bowels were regular; he passed urine readily; and his appetite was good. He suffered absolutely nothing. He was twenty-two years of age, and looked a placid, good-tempered fellow. Nothing was done, save dressing the wound carefully, until October 6th, when I extracted several inches square of the outer table of the iliac bone, which had become loose. The whole length of the crest itself would exfoliate; but, although loosened, it was not yet ready to come away. I transferred this fellow, in the best possible condition, to the surgeons of the Dutch ambulance, on October 8th. From first to last, his wound seemed to give him very little annoyance. He never complained, and I never saw in his face an expression in the very smallest degree indicative of suffering.

CASE XXV.—*Jean Cabirol*, 22nd Regiment of the Line, was wounded and admitted to hospital the same day as *Sannier*; and the nature of his wound was very similar, though not quite so extensive. It involved, however, about half of the left buttock, the muscles being torn away, and the bone exposed and fractured, both the ilium and the sacrum. The right buttock was also extensively lacerated. But it did not look by any means so horrible a wound as the last. Until September 25th, *Cabirol* got on pretty well, when he had a rigor, followed by sweating. The left leg began to swell enormously, into a condition of hard cedema, probably from occlusion of the iliac vein; and he died on October 1st, with all the symptoms of pyæmia. A *post mortem* examination showed well marked hypostatic congestion all over the front of the body. He also had been lying constantly upon his face, like the last man. The left profunda vein was found to be full of pus. There could be no mistake about it. The pus was seen flowing up wherever the part was compressed, after slitting up the femoral vein, which, as well as the iliac, contained a soft red clot. The liver contained numerous abscesses; and in the lungs was a number of large yellow softish masses, like tubercle, which must have been deposits of pus, not yet softened down into ordinary abscesses.

There were two cases in which these buttock-wounds proved fatal from secondary hæmorrhage; and it may here be observed that the secondary hæmorrhage so frequent in gun-shot wound is one of the most serious of complications; it indicates that the fluids of the organism are vitiated by some poison, pyæmic or other. The already weakened forces of the constitution are still further lowered by the losses of blood, difficult to check, and ever ready to return; and the result generally is, that the patient yields, whether the original injury be a very severe one or a comparatively slight one. The main vessel of the injured part may be ligatured; but too often this serves merely as a temporary check; and, if the patient do not succumb previously to the disordered state of his blood, the bleeding will recur probably when the ligature falls. The great frequency of secondary hæmorrhage has for its chief causes the absence or faultiness of sanitary conditions, and the debility of the patients, induced by privation from nourishing food, and the exhaustion and exposure to which they have been subjected. The means calculated to remove or anticipate such evils will, if applied, be of more value than the ligature in coping with secondary bleeding after gun-shot injury.

About this date (Sept. 11th) we had a visit from Captain *Brackenbury*, chief representative on the Continent of the English National

Society for Aid to Sick and Wounded in War. His appearance was most acceptable. Up to that time we had heard nothing from the outside world. We knew not if Paris were besieged or taken, or if a victorious Republic had routed the hitherto victorious German legions. Soon after his visit, we received stores of all kinds—blankets, bedding, food, and surgical assistance in the persons of members of the English Society. What we had been up till then relying upon were the stores which we had brought with us from Paris, partly supplied there by the French Society, and in part too by the English. During all the time we were at Sedan, the French Military Intendance supplied us with rations and with wine, and with a staff of hospital servants. Dr. *Sims* has, in his Report, already awarded a just tribute of praise to the lady-nurses, who arrived also about this time. I cordially endorse what he has said. I only wish we had had them from the outset. In that case, lives which were sacrificed through want of adequate nursing, or rather through the absence of any proper nursing at all, might have been saved. I suppose that it was unavoidable, that much which might have been done was, through the force of circumstances, left undone; but it is not the less distressing to reflect upon afterwards.

To-day we tasted, for the first time since our arrival, a most welcome treat. Some cans of Irish preserved milk, which is most excellent, reached us. This pleasure was, however, more than counterbalanced by a discovery of which we learnt the same day. During the bombardment of September 1st, a couple of fugitive Zouaves made their way into an underground cistern of water which supplied the hospital, all other supply from the town having been cut off. They went in to escape one form of death, only to meet, poor fellows! with another. They were drowned; and their bodies were not discovered until, the water becoming low in the cistern, it was found necessary to descend into it to get the daily supplies for the house. I did not object to eating horseflesh, to which for a day or two we were reduced, although I confess I did not like it; but, when we discovered the nature of the infusions with which we had been washing it down, I admit that I for one, and I believe all the rest, felt very uncomfortable.

A CASE OF RUPTURED UTERUS.

By JOHN M. BRYAN, Jun., L.R.C.P., Northampton.

MRS. L., aged 42, a washerwoman, living a few miles out of town, was at the full calculated period of her eighth pregnancy. She had never aborted. She had had bad health, and suffered from abdominal pain during the latter part of her pregnancy. She had always had hard labours and large children. She had been ill-treated by her husband (a labouring man), and even turned out of doors in the middle of the night during the week preceding her confinement. The midwife, an experienced person, who attended her during her labour, stated that labour-pains commenced on the morning of Saturday, August 27th, previously to which flooding came on; and that on the following Tuesday morning, about nine o'clock, she first felt the child's head *per vaginam*. Mrs. L. lost a considerable quantity of blood; but, as labour progressed, the flow ceased. She complained of pain high up in the stomach during labour, and was sick two or three times. During the last two hours she had very violent pains. A still-born male child was born at 2 P.M.; the placenta was removed with ease about twenty minutes afterwards. There was no faintness during labour; but she became very faint momentarily about a quarter of an hour after the placental birth, and then vomited once.

At 7 P.M. (Tuesday, 30th August) I was called in. The patient was propped up in bed, pallid and very faint; respiration was quick; the voice weak and scarcely above a whisper. The extremities were cold, and the surface covered with a clammy sweat. The abdomen was large and very tender to the touch. The uterus was contracted; there had been no external hæmorrhage. The placenta was removed entire. I lowered her head, gave diluted brandy, and spoonfuls of milk and arrow-root, a full dose of opium, ordered beef-tea to be made at once, and applied a bandage lightly to the abdomen, bottles of hot water to the feet. The sickness returned, the vomited matter being sometimes of a yellowish green colour. I remained with her till 10 P.M., and gave an unfavourable opinion; in fact, I thought she would not live through the night.

August 31st, 10 A.M. She lay on her back, and had not slept since delivery. The before-mentioned symptoms continued. The face was expressive of pain. The abdomen was more swollen, tympanitic, and tender. I drew off about three ounces of dark-coloured turbid urine, and determined to examine the interior of the uterus, which I had abstained from doing the night before, thinking any additional pain and faintness might hasten her end in her then extreme state. On intro-