

worked administrative staff. The following are examples of injury at close range :

Private D., wounded at Modder River on December 10th, 1899. Entrance wound $2\frac{1}{2}$ inches behind right parietal eminence in a line drawn between that eminence and occipital protuberance. Exit through frontal bone in right side close to longitudinal sinus. The bullet traversed at least 6 inches of brain tissue. The left arm was completely, and the left leg partially, paralysed. There was evidence of fracture of the base on both sides. Sanious discharge from both ears and deafness. The fissure seemed to split the skull in two in the vertical plane. A large flap connecting the two bone wounds was turned down and the skull trephined on the inner side of both the exit and entrance wounds. Many fragments of bone were removed from dura mater, and also blood clot and damaged brain matter. The scalp wound united at once, save over the anterior crown of trephine, where it was healing by granulation (on December 27th), and where there seemed to be some tendency to hernia cerebri. The deafness improved rapidly, and the discharge from the ears, at first abundant, soon ceased. On December 27th he could hear well ; no facial paralysis. The leg had recovered power to a very considerable extent, but, as usually happens, the footdrop was almost complete. The arm was still completely paralysed. His memory and mental condition generally were practically normal. Recovery seemed probable. Further notes of this case are promised. Probably the cortex was not damaged by the fragments of bone, but the motor areas of the arm and leg were damaged by the track of the bullet passing close beneath the cortex.

In another case of wound at undoubted short range the bullet entered close to the longitudinal sinus in the occipital vein, possibly even wounding it, and passing out through the frontal bone, traversing several inches of brain matter. The skull was trephined in front of the posterior wound, and it was found that a fissure connected the apertures of entrance and exit. Fragments of bone were removed and brain matter. Free hæmorrhage necessitated plugging the wound posteriorly, but it was not certain that the hæmorrhage came from the longitudinal sinus. Forty-eight hours later the bleeding recurred on the removal of the plug, and it was replaced. Thenceforward rapid recovery. The wound was received on December 15th, and a month later the power had almost entirely returned in the arm and to a great extent in the leg, but there was still marked footdrop. The mental condition was altogether satisfactory.