

brain substance and membranes. When the patient entered the Hospital, brain matter was oozing from the wound. At first respiration was slow; pulse 40; the right side was paralyzed and there was total insensibility. Three days after the injury the bullet was extracted from the substance of the left hemisphere. It was a conoidal ball, and badly shattered. He then rapidly recovered, and the report says that in four months and a half afterwards "the mental and sensory faculties were unimpaired." On October 30th, 1870, he wrote: "I am still in the land of the living. My health is good, considering what I passed through. My head aches some of the time. I am married and have one child. My memory is affected, and I can not hear as well as I could before I was wounded."

These were the only results of this extensive laceration of brain matter. The slight functional disturbance did not correspond with the doctrine of cortical functional centers.

Sergeant Rotherham, wounded at Gettysburg by a musket ball, which penetrated the skull near the right frontal eminence, passed directly inwards and lodged somewhere on the membranes or in the brain substance. The opening through the bone was similar to that made by a trephine, and the track of the ball could be followed on the *dura mater* with a probe for a considerable distance, as that membrane was detached from its natural connections with the skull. The ball was not extracted. There was no perceptible loss of power, motion or sensation on either side of the body. There was no arterial excitement. His recovery was rapid, and five weeks after the injury he was furloughed for fifteen days, at the expiration of which time he returned to duty, having suffered no inconvenience from the journey. After this several bones exfoliated, but his mind was not impaired to any perceptible degree. For some time after the wound was received he was assigned light duty in the Veteran Reserve Corps Hospital.

Lieutenant Brown, at the battle of Wilson Creek, received a penetrating gunshot wound of the cranium and brain. The ball was not removed for seven years after the injury, but in a few days after being wounded he was fit for duty. In January, 1871, this officer was on duty as Captain in the 13th Infantry.

Private Stallman, wounded at Winchester by a musket ball, which entered at the right temple and emerged at the opposite