

### Extraordinary Recovery from Extensive Saw-Wound of the Skull.

By A. C. FOLSOM, M.D.

The patient was an employé of the Casper Mill company, and received an extensive and dangerous wound of the head from a circular saw, July 13th, 1864. I first saw him about half an hour after the accident, and made a hasty examination. The wound extended through the scalp and bones of the cranium and into the brain. Pulse 74, full, soft and flowing. Hemorrhage slight. Patient perfectly conscious and free from pain. I suggested the propriety of moving him to Pine Grove, one half mile distance, to a more comfortable room. He thought himself able to walk. He was conveyed on a litter. On his arrival I made a careful examination. The wound commenced at the frontal bone, one half an inch above the nose, and extended a little to the left and below the occipital protuberance, passing through the the superior edge of the parietal bone. Measured by the convex surface of the skull, the length of the cut in the bones of the cranium was nine inches. They fell apart over an inch, the length of the scalp-wound being eleven inches. The membranes of the brain as well as its substance were divided, the former much lacerated, and the latter falling apart sufficient to admit a common pocket-rule to the depth of one and one half inches, and a small silver probe two inches before touching the walls of the cut. The saw being circular in form, the wound must have been fully three inches deep, extending nearly if not quite to the base of the brain. Thirty-two minute pieces of bone, together with considerable sawdust, were taken from the wound, also a table spoonful of the substance of the brain. The saw itself must have removed as much more. Warm water was used to promote hemorrhage while dressing the first time. The patient did not lose over two ounces of blood. No large arteries were severed. The pulsation of all the cerebral arteries could be distinctly seen. All that portion of the brain visible appeared normal. There was no congestion of the brain or its membranes. During the examination and dressing the pulse remained at 74. There was no pain or undue sensitiveness about the wound. The patient could not tell when the brain, its membranes, or the walls of the cut were touched, even when pressed upon with considerable force. He was sensible when the scalp wound was touched. After removing the hair from the scalp, and cleansing the wound, a common tourniquet, without the pad, was applied to the head, and the edges of the cranial bones were gradually and carefully drawn together. The wound in the scalp required six stitches, an opening being left at each end and one in the centre. Adhesive plaster completed the dressing. I visited the patient daily for three weeks. The stitches were removed on the fourth day. The wound healed by first intention, excepting at the three points where purposely left open. I never succeeded in detecting any variation in the pulse, any cerebral disturbance or any irregularity of the digestive or urinary organs, and none was ever reported by his nurses. No medicine was ever needed during his confinement, not even an opiate. His appetite was always good and his sleep regular.

There was a slight coating of the tongue the second day, but none afterward. The patient was dismissed after daily attention for three weeks, with the recommendation of perfect quiet for two or three weeks more. In five or six weeks from the date of injury he resumed his duties as foreman at the mill, and has filled that position ever since. I have recently examined the cicatrix. The bones appear firm with very little unnatural callus. Mental faculties perfectly intact. He says himself, that he has never suffered from headache, and never experienced any inconvenience from the injury, that he is aware of.

The preservation of his mental faculties is perhaps the most remarkable feature in this very remarkable case. That he should have lived beyond a few moments is surprising; but his final recovery—his brain actually cut in two, accompanied with loss of substance but without any mental or physical derangement whatever, not even temporary—appears incredible. Nevertheless it is true, and ample proof can be furnished if needed.

It may not be amiss to mention, that the saw by which he was wounded is about  $\frac{1}{2}$  inch thick and about 18 inches in diameter, with the speed of about 2000 revolutions per minute. The patient states that "he did not feel the cutting of the saw much, but heard it jingle and ring as it cut through the bones." It is obvious there could have been very little if any concussion, and certainly there was scarcely any hemorrhage. Perhaps for these reasons death was not instantaneous or nearly so. That he should ever perfectly recover, is a great mystery. Others of the profession may advance a satisfactory theory to account for the recovery. I have none to offer.

The above case would have been reported sooner only for the accidental mislaying of the notes taken at the time of the occurrence.

Should any of the profession wish a more careful report on any particular point in this case, the editor of the PACIFIC MEDICAL AND SURGICAL JOURNAL can furnish my address.

[EDITORIAL NOTE.—Being desirous to present this extraordinary and almost incredible case with all possible evidence in favor of its truth, we wrote to Dr. Folsom, requesting a more definite statement in regard to the depth of the wound and the "falling apart" of the cranial bones, with any other facts bearing on the case. We subjoin his answer in full. Our readers now have all the evidence in our possession. We may add that we have no reason for entertaining the slightest doubt with respect to the testimony, as regards the confidence to be reposed in Dr. Folsom. We had heard of the case through other channels and common report, as being extraordinary beyond belief; and this it was which induced us in the first place to write to Dr. F. for a statement of it. We do not concur in Dr. Folsom's opinion that the saw reached the base of the brain, believing this to be totally inconsistent with the continuance of life. Had the teeth of the saw touched both extremities of the wound at the same time, the intervening teeth must have reached the base of the skull, dividing the corpus callosum, optic nerve, etc. But the probability is that the saw, first striking the occiput, communicated to the head a rolling motion, drawing each succeeding portion to it, until the cut was completed. This explanation is corroborated by the statement that the scalp wound was so much longer at the occiput (two inches) than the wound in the skull. The saw too, need not have entered the brain substance more than a few lines, for the wound