

to them—only that all the operations were primary and proved successful, (except three), the emergencies of the case requiring them to be performed at once—the knife almost following the shot. All military surgeons who have seen active service on the field, can testify that many operations have to be performed, under emergencies, that seldom or never occur in civil practice. The non-administration of chloroform in some cases was due to the fact that I was averse to the administration of an anæsthetic previous to full recovery from the shock, as the pulse, which is our principal guide in the administration of anæsthetics, is not, from the depressed condition of the sanguiferous, and nervous systems, following severe gun-shot wounds, in a fit condition to direct us in its use. I amputated in some cases by the circular operation, not from choice exactly, but because the instruments that I happened to have at the time were made exclusively for the circular operation. I may here remark that amongst the numerous cases that I have had, and that I have seen operated upon, my evidence is favorable to the circular operation in all cases where it is practicable. I will not pretend to say that it is the best mode of operating, but certainly less of the soft structures are exposed to the edge of the knife, by circular, than by the flap operation.

The question as to the period at which amputations from gun-shot wounds should be performed, has given rise to much discussion amongst surgeons. I believe that most modern writers on military surgery concede the fact, that where amputation is inevitable, that the best time to operate is after the shock to the system has subsided, the pulse regained its vigor, and the skin its natural warmth. Without pretending to question the judgment of older writers on military surgery, I can fully endorse the opinions of Larry, Guthrie and others, that primary operations are more successful than secondary ones, and that the sooner the operation is performed after the injury, the greater the chances for saving the life of our patient. Take a soldier, for example, whose hand and wrist have been mangled and crushed by a fragment of shell, we wait from two to three days for reaction or recovery from the shock—the brilliant eye, the intense pain, hot skin, and accelerated pulse all indicate that reaction has taken place. We now place him under the influence