

PRIMARY DOUBLE AMPUTATION OF THE THIGHS, SUCCESSFULLY AND SYNCHRONOUSLY PERFORMED FOR RAILWAY INJURIES TO THE LEGS.

By JOHN L. BRAY, M.D., Chatham, Ont.

At a time when railway accidents are of so common occurrence a record of every case would soon furnish valuable statistical material for comparison and contrast. Any appreciable record of these injuries has not fallen under my notice, if any such there be, and it is with a desire of contributing towards furthering this object that prompts me to offer the following case of primary double amputation at a time, too, when the relative merits of hospital and private practice, of primary and secondary amputations, or of antiseptic dressings, as affecting amputations and other capital operations, are under discussion. This case may prove of some interest, occurring, as it did, during the hottest days of July of the present year, treated away from the patient's home, in a house the general arrangements of which were poorly regulated, nursed by strangers, willing enough, it is true, but by no means skilled hands, and having the further disadvantage of being surrounded by a marshy locality and malarious atmosphere, while it had, on the favorable side of the question, the all-important advantage of a strong, healthy and vigorous constitution. Reacting from the shock in less than two hours sufficient it was thought to warrant the next ordeal, synchronous double amputation of the thighs, it offers, I think, a fair case for comparison.

On the 15th of July, 1878, I was summoned to Jemnetts Creek Station, in my capacity as surgeon to the G. W. Railway Company for this district, to attend N. C., a strong, healthy, well-developed French Canadian, 21 years of age, who, while attempting to get on a freight train that was passing at the rate of about 18 miles an hour, had been knocked down, and his feet and legs run over by several car wheels before the train was stopped, or assistance rendered. All other parts of his body escaped, with the exception of a slight bruise on the upper part of the left knee. He was immediately carried to a neighboring house, about 50 yards away. Taking Dr. Murphy of Chatham with me, we arrived at the place, which is about 14 miles

distant, in less than two hours from the time the accident occurred. We found our patient lying on a low bed, moaning and complaining bitterly of pain; his face was quite pale; the surface of the body cool and clammy; pulse 105, feeble but regular and of gradually increasing power after taking about 4 ounces of whiskey. There had been very little hemorrhage, and this now had entirely ceased. On examining the legs it was found that they had sustained the following injuries: All the soft parts of the left, including skin, superficial fascia, muscles, vessels and nerves, were entirely torn and dissected from the anterior circumference of the limb, extending from the middle of the foot to the knee, crushing and laying open the ankle joint, fracturing the bones of the leg after every possible fashion, splinters of bone extending up into the knee joint. The right leg was found to be less damaged than the left, the wheels passed over it just above the ankle, crumbling the bones into fragments, and mutilating the soft parts up to the knee to such an extent that any attempt, even here, at amputation by disarticulation, such as Langenbeck of Berlin is now advocating, was found to be too risky an undertaking to be justifiable; from the character of these injuries it would seem that the wheels had engaged the long bones at several points of their axes, thus causing such an extensive destruction of parts involved. One can readily imagine how this might happen if the man moved or slightly rotated his limbs after the passage over them of the first wheel.

The patient being placed under the influence of chloroform by Dr. Murphy, and Esmarch's bandage having been applied from just below the knee to the middle of the thigh, I proceeded to remove the left limb. Having decided on the circular operation, I began my incision about one inch below the knee, and dissecting up the integument and fascia a sufficient distance, divided the remaining structures down to the bone, which was now sawn through in the usual careful manner, about one inch and a half above the condyles. I now allowed Dr. Murphy to amputate the other limb which, after applying the elastic bandage as before, he did by making lateral flaps, bringing the knife out below the heads of the tibia and fibula, in order to put to the test the relative superiority of the two methods. Flaps of sufficient length having been