

ened judgment of the surgeon, than to be settled beforehand according to any general rule."—*St. Louis Med. and Surg. Journ.*, Nov. 1872.

*Ligation of the third portion of the Subclavian Artery and Amputation at the Shoulder-joint.*—The following case of this is related by Dr. ALFRED KINNEY, of Portland, Oregon:—

J. S., æt. 35, a healthy Irish laborer, was run over by a railroad car, at the East Portland depot, June 6th, at 11 A.M. A physician saw him immediately afterward, at the Railroad Hospital, and controlled the hemorrhage until my arrival, an hour later. I found the bones and muscular tissues of the left arm and forearm completely crushed; small fragments of the humerus having been driven in and around the shoulder-joint, lacerating the axillary artery as far up as its origin.

On account of the very extensive laceration of the axillary artery, we determined, during a hasty consultation, to ligate the subclavian before removing the arm, which I did in the third portion, assisted by Drs. Rafferty and Aug. C. Kinney; and afterwards severed the arm at the shoulder-joint.

Having removed the spiculæ of bone, and cut away all the badly lacerated and extravasated tissues from the shoulder, we trimmed the least contused portions of the integument into flaps, much like those of the Baron Larrey operation. The wound was united by silk sutures, leaving an opening at the most dependent part for drainage, and dressed with oakum and a weak solution of carbolic acid. The patient, who was suffering from the severity of the shock, was given stimulants in large doses.

There were no other symptoms than those usually following such severe injuries, until the fifth day, when gangrene commenced in the wound: the shoulder in the course of a few hours becoming œdematous; the integument changed to a darker colour, and a thin, offensive discharge ran from the wound. Fever was very high and the pulse 140 per minute. Immediately the partially united wound was laid open by free incisions, and thoroughly washed out with a strong solution of carbolic acid. The gangrene ceased, and in a few days the mortified parts began to separate. The patient improved from this time. Enough integument was left, after the separation, to cover the bony prominence, excepting a chasm anteriorly, which filled up with granulations and cicatrized over within two months after the time of the accident.

The ligation came away from the subclavian on the 17th day. The patient is now entirely well.—*Pacific Med. and Surg. Journ.*, Nov. 1872.

*Amputation through the Metatarsus.*—Dr. G. W. TOPPING records (*Michigan Univ. Med. Journ.*, July, 1872) a case in which this operation was performed.

F. J. P.—, æt. 18, on the 4th of January, 1870, by a single blow from an axe, severed the first four toes in a slanting direction, partly through the heads of the metatarsal bones, and partly through the metatarso-phalangeal articulation. The detached portion hung only by a piece of skin an inch in width, and the bones protruded so as to render amputation higher up necessary.

An oval flap was dissected from the dorsum of the foot, the metatarsal bones sawn through their middle, and a large flap taken from the planter surface by cutting from within outward. Two arteries only required ligatures. The wound healed very quickly, leaving a good sound stump, upon which he walks with but a slight limp, and does all kinds of farm work, such as plowing, dragging, &c., as well as before the accident, without producing any irritation of the stump. There is no dragging of the stump and consequent liability to ulceration, as is so commonly the case after Chopart's operation.

I am not aware that any writer upon surgery has either recommended or described the above operation. The nearest approach to it is, what is known as Hey's, or, by some, Lisfranc's, operation through the metatarso-tarsal articulation, or, as it was sometimes performed, by sawing off the head of one or more of the metatarsal bones. This (Hey's) operation has seldom been performed, even in cases where it would have sufficed the purpose of amputation.