

TECHNIQUE OF OPERATION.

The most scrupulous care must be taken to avoid infection. The part should be carefully prepared twenty-four hours before operation, and a pad wet with 1-1,000 bichloride of mercury solution left on over night and the preparation of the skin repeated just before the operation. Strong rubber gloves should always be worn, also cap and mask. Good free incisions are imperative; and all manipulations of the soft parts and bones reduced to the minimum. It is better to handle the tissues with instruments exclusively so as to avoid any possible chance of infection, as this is the one great danger.

The bones are secured with wire, pegs, nails, plates, screws or staples. Each of these materials is specially suited for individual cases. The writer has found that silver wire, even when well annealed, is too fragile and would advocate bronze aluminum wire or ordinary stove-pipe wire in preference. Wire may be used for small bones. Staples are suited for spongy bone, such as tuberosities. Screws offer the best means of securing bones together after the fragments have been drilled, either with or without the use of steel plates. Screws are better made with the thread running right up to the head, as they then will hold better in compact bone and are more easily inserted.

After all hemorrhage has been controlled, the soft parts, including the deep fascia, are brought together with catgut and the skin with horseshair without drainage.

The various materials used rarely give rise to irritation, but should they do so, they may be removed through a small incision when firm union of the bone has taken place.

In certain cases it may be necessary to use splints for a short time and passive movements are commenced early.

In connection with these remarks I desire to record the notes of one of many cases of fracture treated by the open method.

E. H. S., aged 30, referred to me by Dr. C. J. Copp. On January 14, 1909, he fell 18 feet and sustained a transverse fracture of the femur immediately above the condyles, which latter were split apart into the knee joint, constituting what is usually termed a "T" fracture. There was a large effusion of blood into the surrounding tissues and into the knee joint. An endeavor was made, under an anesthetic, to bring the fragments into apposition, but without the slightest success. Two days later the parts were freely exposed by a semilunar incision on the outer side of the leg commencing seven inches above the knee and passing inwards below the joint, dividing the ligamentum patellae en route, thus freely opening the knee joint. This large flap was