

throughout. The arm was then put in a simple sling for a fortnight. The condition did not improve, so five weeks ago a surgeon ill-advisedly explored the median nerve about the elbow and found it normal.

Present Condition: The left arm is flexed at a right angle. There is sound union of the broken humerus without any shortening. Comparative measurements of the two arms show the whole injured member to be about one-half inch smaller in circumference than its fellow, except just above the elbow, where the two arms are equal in size. This is easily accounted for. By palpation and also by an x -ray examination, a mass of new bone is found around the seat of fracture, being more marked on the inner side. This prominence limits the range of active movements in the elbow joint from 75° in flexion to 95° in extension. The slight atrophy present is no doubt due to disuse, for the arm has not been used for three months. The forearm is held in a semi-pronated position. The arm can, however, still be actively pronated and supinated to a limited extent, the biceps being mainly used in supination. The hand is flexed to a right angle at the wrist, but can be actively flexed and extended through an arc of 10° . The flexor tendons are very tense as they cross the wrist, especially the palmaris longus. The first phalanges of the fingers are slightly hyperextended, the second and third being flexed, those of the ring finger most and the middle finger hardly at all. The thumb is held quite straight, only feeble movements of flexion and extension are possible. The interphalangeal joints of the fingers can be voluntarily moved, the flexors being much stronger than the extensors. There is no movement in the distal interphalangeal joints of the ring and little fingers. The wrist and fingers cannot be extended at the same time, but after strongly flexing the wrist the fingers may be straightened. The muscles of the forearm feel very hard, almost board-like. The interossei muscles feel soft and are functionless, all power of abduction and adduction of the fingers being lost. There is very slight wasting, however, in these muscles, the lean appearance of the hand seen in ulnar nerve paralysis being absent. The thenar and hypothenar eminences are much flattened and feel soft. There is total anæsthesia of the skin on the dorsum of the hand supplied by the radial and ulnar nerves and also an area on the palm of the hand corresponding exactly to the distribution of the ulnar nerve. On the inner and posterior aspect of the wrist there is a red, thin, glazed scar with a small broken area near its centre. This is the result of pressure due to the tightly applied strapping twelve weeks ago. The radial and ulnar pulses are normal in volume, although the circulation in the hand seems poor, the skin becoming blue and mottled when the hand is dependent. There is a perpendicular scar four inches long on the front of the upper arm running down to the elbow, the result of the operation on the median nerve. All the muscles of the arm, with the exception of the interossei