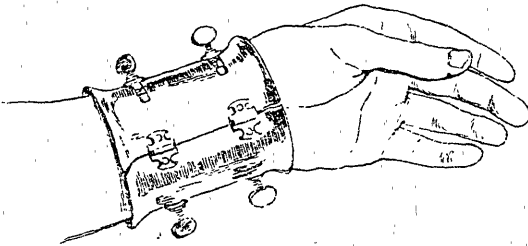


bone. The destruction of this tissue (which is more apparent in old patients) would cause the line of the radius to be deflected backwards, irrespective of any muscular action, when the two surfaces are brought into apposition, and assists in producing that tilting backwards which is entirely attributed to the muscles at present.

Second. There is a *disturbance of normal contact* in the radio-ulnar articulation, not in all cases amounting to dislocation, which, unless restored and retained, will not yield a satisfactory result. To make this clear it must be noted that the fractured end has the ulna articulation on its inner surfaces, and any disturbance of the normal position of the lower end of the radius must necessarily disturb the articulation of it with the head of the ulna. This in a number of cases amounts to dislocation and



rupture of the triangular fibro-cartilage, so that one of the chief points necessary in the treatment is the *proper reposition* of that articulation and its *permanent retention*. The head of the ulna then acts just like a splint on the inner side of the radius, and reduces the treatment to retaining it fixedly, and overcoming the action of the supinator longus on the outer fragment, where it has considerable leverage.

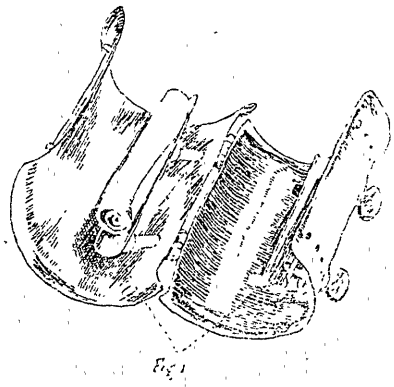
I have endeavored to apply this principle, and simplify the application of the splints suggested by Prof. Moore and Pilcher, by means of the Cuff-splint. Moore's roller has been difficult to apply in my hands, as it gives no means of regulating the pressure required, and the roller would not remain in position and the edges of the adhesive plaster cut through the skin. Pilcher's two rollers, it was found impossible to keep parallel with an India rubber adhesive

strap. The circulation was much interfered with, and the swelling stretched the strapping, too little or too much compression being the rule.

These considerations led me to endeavor to devise a form of *unyielding cuff* through which could be obtained the necessary splint pressure without interfering with the circulation, and at the same time be able to *regulate the pressure without endangering the apposition of the injured parts*.

With this Cuff splint I have endeavored to overcome these difficulties, and submit it with the following brief statement of what may be considered its advantages.

It is an unyielding cuff which will fit any wrist of any size. It contains two shallow roller-holders (the splints), one adjustable to the



external surface of the radius, the other to the front of the radio-ulnar articulation.

These are regulated by screws, as to the *exact* amount of pressure required to keep the bones in position, and as to the *exact* place to apply the splints, by slots in the cuff, through which they may be moved at pleasure.

Reduction of the fracture and the head of the ulna being correctly adjusted, the cuff is applied, hinge to the front; then the upper splint, when screwed down on the radius, keeps by *counter* pressure the ulna head in its normal position, and by its *direct* pressure, keeps the fractured end from deflecting the slightest from normal. The lower splint is not always required, but by its pressure on the radio-ulnar articulation does all which Moore's appliance does.

The wrist can be examined at all parts except under the little roller splints.