

Let me take, as a good example of the treatment, an ordinary case of fractured patella. Every one knows that the joint soon fills up with blood and synovia, which take many days for their absorption, but every one apparently does not know that, if the case be seen before effusion has occurred, it may be entirely prevented by wrapping the knee-joint up in cotton-wadding, and applying a plaster-of-Paris bandage firmly over all. I have treated many cases in this way with only a couple of days' confinement, and believe that I have in some cases got osseous union between the fragments, so firmly are they knit together.

But, if effusion have already taken place, it is easy to get rid of it, if coagulation of the blood have not already occurred, by the use of the aspirator; and, the wadding and plaster being at once applied, no further effusion takes place, and the patient begins to walk about with a stiff knee as soon as the plaster is dry.

Unless a fractured tibia be very much comminuted and bruised, I look upon plaster-of-Paris, applied as soon as possible, as the ordinary treatment to be adopted; and certainly, in Pott's fracture of the fibula, with or without fracture of the internal malleolus, nothing is so comfortable to the patient, or of so little trouble to the surgeon, as a boot of plaster properly applied, with the foot carefully held at a right angle to the leg.

In the fractured thighs of children, I believe better results can be got by the immediate application of plaster-of-Paris over cotton-wadding than by any other method—even than by Hamilton's double thigh-splint with cross-bar, which is very convenient. And here let me venture to controvert a part of one of Dr. Cowling's aphorisms: and the routine teaching of most surgical works, viz., that the joints above and below a fractured bone should be included in any apparatus and kept quiet so long as the fracture is under treatment. If a fracture be close to a joint, and *a fortiori* if it involve the articulation, then of course its fixation is essential; but why, with a fracture in the middle of a long bone, we should insist upon crippling a patient by doing our best to give him two stiff joints, I fail to see. With imperfectly fitting splints, it may no doubt be desirable to fix approximately the neighbouring articula-

tions in order to obviate movements which would disarrange the fracture; but how incomplete the fixation is, any one may see who will watch a case of fractured thigh treated with the long splint. To enclose joints unnecessarily with plaster-of-Paris, is to provide cases for the "bone setter;" and I should never include the knee or hip-joints in any ordinary case of fractured shaft of the tibia or femur. Many surgeons have exaggerated ideas of the tendency of muscles to produce displacement. They have some tendency to contract spasmodically immediately after an accident; but this soon passes off, particularly when they are firmly and equally compressed.

The apparatus for the treatment of fractured clavicle are too numerous to mention, and perhaps the simplest and best is Sayre's method with three strips of plaster. But I will venture to say that better results will be got by encasing the patient, with his ordinary jersey on, thoroughly in a plaster-of-Paris bandage, than by any other method. The clavicle being a short bone, it is of course necessary to fix the shoulder-joint by encasing the humerus and fixing it to the side; but it is quite unnecessary to fix the elbow-joint, which should be left exposed, the fore-arm being carried in a sling and used with moderation.

Fractures of the neck of the humerus may be similarly treated, if the axilla be thoroughly padded with cotton-wadding, and without a shoulder-cap, which latter is always cumbersome and very apt to gall the patient.

Fractures of the shaft of the humerus may be treated with plaster from the first, alone or combined with three splints; but fractures low down, and separation of the lower epiphysis in young children, I find best treated by thoroughly flexing the fore-arm upon the chest and maintaining it there with ordinary bandaging.

Fractures of the fore-arm are the only ones which seem to me unsuited for treatment with plaster-of-Paris, and for the obvious reason that there would be great danger of drawing the two bones together. Two simple splints, not too wide, should be applied while the fore-arm is supinated, and then brought by the surgeon into the position between supination and pronation: these answer every purpose, while for Colles' fracture Carr's splint is the best. In fracture of the olecranon,