

the importance attached to it. From simply regarding the external appearances presented by this fracture, it was formerly supposed that the bones yielded in an oblique direction; but observation of pathological specimens has shown that it is, on the contrary, almost always transverse, the peculiar deformity arising not so much from the overlapping of the fragments, as from the direction of the displacement by muscular action. Dr. Smith, of Dublin, in twenty specimens which he examined, found the fracture to have a transverse direction in eighteen. In the present specimen it is transverse.

Dr. W. said he would avail himself of this opportunity to show a very efficient apparatus for making extension in fractures of the lower extremity of the radius, contrived by Professor Beaumont, of Toronto, to whom the profession is indebted for the invention of many ingenious surgical instruments, some of which have been for a long time in use at our Hospital.

This apparatus consists of an angular splint, made of gutta-percha, adapted to the bend of the elbow. To this is attached a bar of iron, which extends beyond the hand, and is then bent to a right angle. This latter portion has attached to it two axles, with ratchet wheels, for the purpose of making extension by means of cords attached to a leather cap laced to the wrist just above the joint. In addition, there are two small splints adapted to the anterior and posterior part of the forearm.

The following extract from the letter of Dr. Beaumont to Dr. W., describes the method of application :—

“ The patient's arm and forearm, having been bent at a right angle, should be placed in the angular splint, and there fixed by a bandage. A piece of gutta-percha, of the shape of the leather cap, may then be softened and wrapped round the carpus and metacarpus, in order to protect the skin from any painful pressure; and when the gutta-percha has become hard, the cap is to be laced tightly over it, and in such a manner that one loop of the cap shall be on the radial border of the metacarpus, and the other loop on the ulnar border. The strings from these loops may, by turning the angles, be more or less tightened, so as to keep up permanent extension, which will be as nearly as possible in the axis of the broken radius, and the distal fragment will thereby be drawn very nearly into its normal relative position with the proximal fragment. The extension should be so gradually made as to remove the displacement with little or no pain to the patient: but should the extension become painful, it may be lessened by throwing the catch out of the teeth of the ratchet-wheel, and allowing the angle to revolve backwards. The anterior and posterior splints need not be applied for the first week, especially if the distal end of the forearm should be much swollen and inflamed, and as this part may be left exposed in it