

## CASES OF ORTHOPÆDIC SURGERY.

By Dr. BEREND, Director of the Orthopædic and Gymnastic Establishment at Berlin.

CASE I. *Permanent Restoration of the Functions of a stiff Elbow-joint (complete Ankylosis) by Resection of the Epiphyses.* The operation was executed five years ago; and, considering the amount of osseous ankylosis, it was indispensable. The result exceeded all expectation, inasmuch as the motion of the elbow-joint, which was quite impossible before, was perfectly restored. Of physiological interest is the circumstance, that the resected epiphyses of the upper arm and ulna grew into the shape of a real elbow-joint. This regeneration was not obtained by the preservation of the periosteum.

CASE II. *Spurious Ankylosis of the Elbow-joint; Oblique Fracture of the Epiphysis of the Humerus.* The fracture had passed through the internal condyle and trochlea without any luxation. The internal condyle was split into two fragments, the undermost of which was dislocated and united to the uppermost. The joint had become useless. From the nature of the injury, an operation in this case was not admissible; but the advantage obtained by gymnastic treatment appears the more evident.

CASE III. *Spastic Right-angled Fracture and Ankylosis of the Elbow after a Fall, cured merely by Gymnastic Exercise.* This observation belongs, perhaps, to those that are most rarely met with, and may be compared to a similar case of spasmodic knee-contraction caused by injury of the leg, the highly interesting cure of which is described by the author in the tenth account of his establishment (p. 10, Berlin, 1861, Hirschwald). The above patient suffered a fall, in consequence of which the elbow was at once permanently placed at a right angle. Neither the application of cold nor plaster bandage brought relief. Gymnastic treatment, carried on for three months, perfectly restored the functions of the joint.

CASE IV. *Fracture of the Forearm, Gangrene, Consecutive Contraction of the Forearm and of the Wrist, with Impossibility of using them. Section of the Palmaris Longus. Treatment by Orthopædic and Gymnastic Exercise. Restoration of the Normal Shape and of the Functions of the Forearm and of the Hand.* This observation proves the correctness of Dr. Berend's opinion, that, with a certain species of distortions of the fingers, the carpal flexors are principally concerned; and that the resection of them (in the above mentioned case, the resection of the palmaris longus) is sufficient, while tenotomy of the real flexors of the fingers is to be avoided. At the same time, the usefulness of a rational and varying gymnastic and orthopædic treatment, in which so often the whole mystery of orthopædy is comprised, is placed in the proper light.

CASE V. *Paralysis of the Right Lower Extremity in an Infant; Inclination of the Pelvis; Varus Paralyticus; Cure by an Operation, by Orthopædy, and Electricity. Anchioration of the Walking Movement by Application of an Orthopædic Apparatus. Restoration of the Normal Position of the Pelvis.* The indispensableness of orthopædy as a means of support with paralytic muscles, especially of the nether extremities which are short of the quadriceps, is shown by this observation. The quadriceps is replaced by propping the knee and transferring the whole power of bearing to the muscles of the hip, as the latter suffice to effect locomotion. The realisation of this principle (which, unfortunately, is by no means universally acknowledged) is repeatedly recommended

to the physicians, and the success obtained in the case just mentioned pointed out.

CASE VI. *Ankylosis of the Thigh at both Sides, with the highest Degree of Adduction, and nearly right-angled Pronation of the Trunk, in consequence of Rheumatism; Forcible Extension also in the Abductive Direction. Treatment by Orthopædy and Gymnastics; Essential Improvement.* This case is, in spite of Dr. Berend's long experience, especially in deformities of the hip, the only one of this kind that has ever occurred to him; and only a single deformity of the hip, although but of one side, has been described by the author in the tenth account of his establishment. The great value of a thorough diagnosis of this kind of diseases, which are so difficult to distinguish, appears as evident from this observation as the necessity of immediate forcible stretching of the hip in the highest degree of ankylotic juncture. In regard of the treatment after the operation executed, the advantage of gymnastics and orthopædy, in order to straighten that part of the body which had so long been in a perverse position, is to be put into consideration. The orthopædic apparatus invented by Dr. Berend for this purpose, which is inserted into the bed of extension, and at the same time a supporting apparatus, of which the author gives us a very fine picture, most evidently prove that it is not only the operation, but the proper treatment after it, from which a favourable result for the cure of deformities may be expected.

CASE VII. *Ankylosis of both Knees. Successful Treatment by Forcible Extension.* While the preceding case explains to us the importance of the highest degree of ankylosis of the hip, the latter presents us an inveterate ankylosis of the knee with a person of advanced age. Here we see improvement obtained in a man of fifty-eight years of age, suffering from arthritic nodosis, after he had with difficulty dragged himself along by means of crutches. Here, too, the brisement force was the only expedient, which in a few months effected an upright carriage. The latter two observations, being most unmistakably illustrated by instructive pictures, will preserve a lasting value for the pathology of deformities.

[Dr. Berend's cases are interesting; but he does not tell us that which practitioners would most desire to know: viz., the nature of the gymnastic and orthopædic treatment which he employs. Ed.]

BEQUEST. By will, the Hon. Gertrude Florinda Tollemache has bequeathed to the Middlesex Hospital all her linen and under-clothing, and plain pocket-handkerchiefs without borders or lace.

SMOKY AIR. The Registrar-General makes the following opportune remarks on the atmosphere and thoroughfares of London:—"If coal were cheap, the greater command which the poor would have over that commodity would materially help to reduce the winter rate of mortality; and if smoke were abated at domestic fires, as well as at bakers' ovens and public furnaces, by more thorough combustion of fuel, the carbonaceous particles which they emit would not darken the air and pollute whatever they touch, nor, by forcing a passage into the throat and lungs, aggravate or excite fatal pulmonary complaints in human beings. Given a broad river, with a temperature at the time above that of the air; let there be another vast moisture exhaling the surface on its banks 60 or more square miles in extent, and this area covered with houses which pour smoke from a million of chimneys into a still atmosphere, and the result is that almost impervious fuliginous mass called 'a London fog.'"