DEFORMITIES OF THE FEET.*

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(Concluded from page 235.)

Types of Flat Foot.

There are two main clinical types, which it is convenient to distinguish from the point of view of treatment.

(1) Those in which the patient can voluntarily restore the arch.

(2) Those in which he cannot do so. The treatment of the first—which is the mild type-is non-operative. It consists in preliminary rest if the pain is severe, followed by (1) strapping; (2) massage and electrical stimulation; (3) baths (alternate hot and cold, or whirlpool); (4) exercises; (5) re-education and correct attitude in standing or walking; (6) special boots, raised on the inside.

The acute and painful variety (the errand boy type) requires the forcible breaking down of adhesions; and then treatment as above.

The rigid flat foot, with adhesions, should be converted into an acute one, by wrenching. No massage or physio-therapy will help the osseous type of flat foot, which requires operation.

CLAW FOOT.

The characteristics of this condition area high arch, with contracted plantar fascia and dorsi flexed toes, and often a contracted tendo Achillis.

Among the causes may be noted the wearing of short, ill-fitting boots and socks. These latter are of importance. It is not recognized how often short, ill-fitting socks cramp the foot, and prevent spreading and action of the Sometimes there seems to be a contoes. genital factor at work, and some of the cases again are probably the result of infantile paralysis. This paralysis has been of a mild and transient nature, affecting the anterior muscles, weakening them, and so allowing the posterior group to shorten.

Trench feet and frostbite are, again, often followed by claw foot, but we will refer to trench feet more fully later, if time permits.

Claw foot has been divided into stages, depending on the severity of the deformity, the first stage being simply some shortening of the tendo Achillis, causing clumsiness in the gait and liability to fall, and is noticed in The second stage is recognized by children. some contraction of the sole, with hyper-exten-

* A lecture delivered to the Members' Conference Incorporated Society, of (Trained Masseuses, October 5th, 1917.

sion of the great toe. Simple manipulation without any force restores the foot to normal appearance. And so through several degrees of deformity till the fifth stage is reached, when the ill-nourished and crippled foot, very tender, and with corns innumerable, calls for amputation, or partial amputation, in order that the patient's life may be made tolerable.

The treatment depends upon the severity of the conditions.

Early.—Stretch tendo Achillis by splintage.

Later.—(1) Tenotomy; (2) Wrenching; (3) Transplantation of Extensor Longus Hallucis.

After Treatment .- Physio-therapy. Boots. The after-treatment must be long and

thorough if we are to avoid disappointment and recurrence. Here again you can appreciate the inter-dependence of the surgical and after-treatment sides, how the one is the complement of the other, and how the one is futile without the other.

TRENCH FOOT.

In military work at the present time the condition known as "Trench Foot" is responsible for many of the deformities and disabilities with which we are concerned this evening. The predisposing cause is long immersion in water.

The conditions under which men can exist in France in winter one can hardly realize. For forty-eight hours, and in the 'earlier days of the war for much longer periods, men would be literally standing up to the waist in water.

This prolonged immersion in cold water is the chief causative factor. What other factors may be at work is uncertain. It may be there is some local infection superadded.

The trench foot passes through-or may pass through-three stages.

(1) The acute stage, when it is swollen and exquisitely tender.

(2) The subacute, emerging into the chronic stage.

(3) The stage of deformity, which is either (a) Remediable, (b) Fixed.

The treatment of the acute stage is REST, with heat and the gentlest of massage. Not many cases of Trench Feet in this acute stage come under my personal notice, but I have heard very good accounts of their treatment by means of Diathermy.

Diathermy is, as most of you know, the electrical method par excellence of applying heat. It is nothing more.

The pads connecting the patient to the apparatus may be either wet or dry. They are placed either one at the toes and one round the



