

equinus has been fully made, the time has come when mechanical appliances may be advantageously employed. Though other mechanical means than that referred to in the fixed dressings may be quite unnecessary for the rectification of the deformity, yet for the retention of the foot in its new position, and for the prevention of relapse, effectual mechanical appliances are essential. The shortened tissues of the inner side, when stretched so as to permit even of over-correction, long manifest their elasticity and a disposition to invert the foot. Also where the weight of the body does not fall upon the arch of the foot as in walking, but where the anterior portion of the foot is deflected inward, it manifests a tendency to resume its original position, the heel being drawn up, and the anterior portion of the foot depressed. This is the case especially at night when, the patient lying in bed, the bed-clothes draw the foot downward toward its old position of deformity; hence there is necessity for mechanical means to be employed to retain the foot in its corrected position, both in the day-time while the patient walks about and also at night.

To prevent relapse in the day time the most successful means is employed when a boot is properly constructed. The last should be broad, and should differ from an ordinary last in being everted at the part which corresponds to the mid-tarsal joint. A model for making lasts of this kind may be obtained by taking a good last made for a normal foot, sawing through its inner border at the part which corresponds to the medio-tarsal joint putting a wedge of say, one half or three-quarters of an inch into the cut thus turning the anterior part of the last outward; the lasts which are made following this model will be suitable for the construction of a proper boot. The boot should always fit accurately and should be made of firm leather. The ordinary heel-counter should be carried forward at the outer margin as far as the base of the fifth meta-tarsal bone and a resisting counter should be put in at the inner margin opposite the head of the first meta-tarsal bone. The sole of the boot and the heel should be projected laterally outward and should be built thicker than the heel and sole at the inner margin. In this way when the patient puts his foot down upon the ground the foot is made to turn into a position opposite to that in which it was found

originally and the forces at work through the agency of the boot are made to counteract the tendency to relapse.

The appliance used at night is an exceedingly simple one, consisting of a foot piece made to fit correctly the plantar surface of the foot and attached at an angle of say, 80° to a leg piece which reaches to the upper portion of the calf, a heel guard being attached to the lower part of this leg-piece and extending upward four or five inches. A strap passes over the instep and holds the heel well down into the angle between the foot piece and the leg piece, thus keeping the foot in its relation to the leg at an angle of 70° to 80° , during the night. At the same time a strap may pass over the dorsum of the foot and between the foot and the sole plate and through a loop at the inner margin in such a way as to lessen the natural tendency to incurving of the foot at the mid-tarsal joint. These appliances are shown in Figs. 6, 7 and 8, and on the patients who are here exhibited.

Allow me to emphasize just here that the appliances described are not intended to be employed for the *correction* of club-foot, but only to *prevent relapse* in a foot that has been fully corrected.

There are classes of cases which are more difficult to treat than those above described. Where it is found impossible or impracticable to correct the deformity by manipulation, the tenotome should be employed for the cutting of tendons or bands of fascia which stand in the way of rectification. There is a large proportion of cases that may thus be treated making the incisions subcutaneously. The tendons most demanding this section are the tibialis posticus, the tibialis anticus, and the tendo Achillis. The plantar fascia, a portion of the internal lateral ligament and the inferior calcaneo-scapoid ligaments also require section in a considerable number of cases. The tibialis posticus and tibialis anticus are best cut by an incision that is made anterior to the internal malleolus quite close to their insertions. The tendo Achillis should not be cut until the varus has been fully corrected. In cutting this tendon its narrowest part should be sought after, which is at a short distance above the point of its insertion. Here the tenotome should be introduced at its inner margin so that the point may be directed away from the posterior tibial artery. The knife