

A MACHINE FOR THE FORCIBLE CORRECTION OF DEFORMED FEET.

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The spectacle of a surgeon wrestling with a deformed foot is a common one. Some operators claim to derive keen pleasure from the exercise, even though it bring flushed cheeks and a beaded brow. The necessity for strenuous efforts has, however, led to the introduction of many forms of wrench or lever to aid the power of the hands, and in Canada the most familiar of these is the Thomas wrench.

The contrivance described below presents, it is thought, original features, and is for this reason presented for consideration. It consists of a body and a long lever. The body is a piece of iron several inches broad and somewhat longer than the lower leg, shaped to permit this to rest evenly upon it. It is pierced by a series of holes for tapes fitted with buckles, which are used to secure the leg from the knee to just above the ankle. The upper end of the body presents a cross piece to prevent rotation of the leg; the lower end is curved to fit the prominent heel of a club foot. The heel piece is pierced by numerous holes to receive the end of the lever and an iron pin for counter-pressure. Both lever and pin can be placed wherever they will act to the greatest mechanical advantage.

The lever is long and strong and at its distal end has a cross bar to serve as a handle, should twisting be required. It is jointed close to its proximal end, the smaller piece being received into one of the holes in the heel piece. Its joint permits of motion in all directions, including twisting. Attached loosely to the lever is a small curved flange of iron which, well padded, is to transmit the force of the lever to the foot.

If we suppose the foot to be operated upon is a talipes equino-varus of the congenital variety, the deformity first to be corrected is, according to common custom, the varus. If considered necessary, any cutting operation, as tenotomy of the plantar fascia or the astragalonavicular ligament, is first done. The leg is then strapped to the body of the machine (previously sterilized), and the pin (well padded) adjusted in the region of the cuboid bone. This latter is done because the deformity in a typical case of equino-varus in medio-tarsal and not at the ankle joint. The lever is then adjusted to the socket where it can be used to the greatest mechanical advantage, and the flange, well padded, is placed against the inner border of the foot in the region of