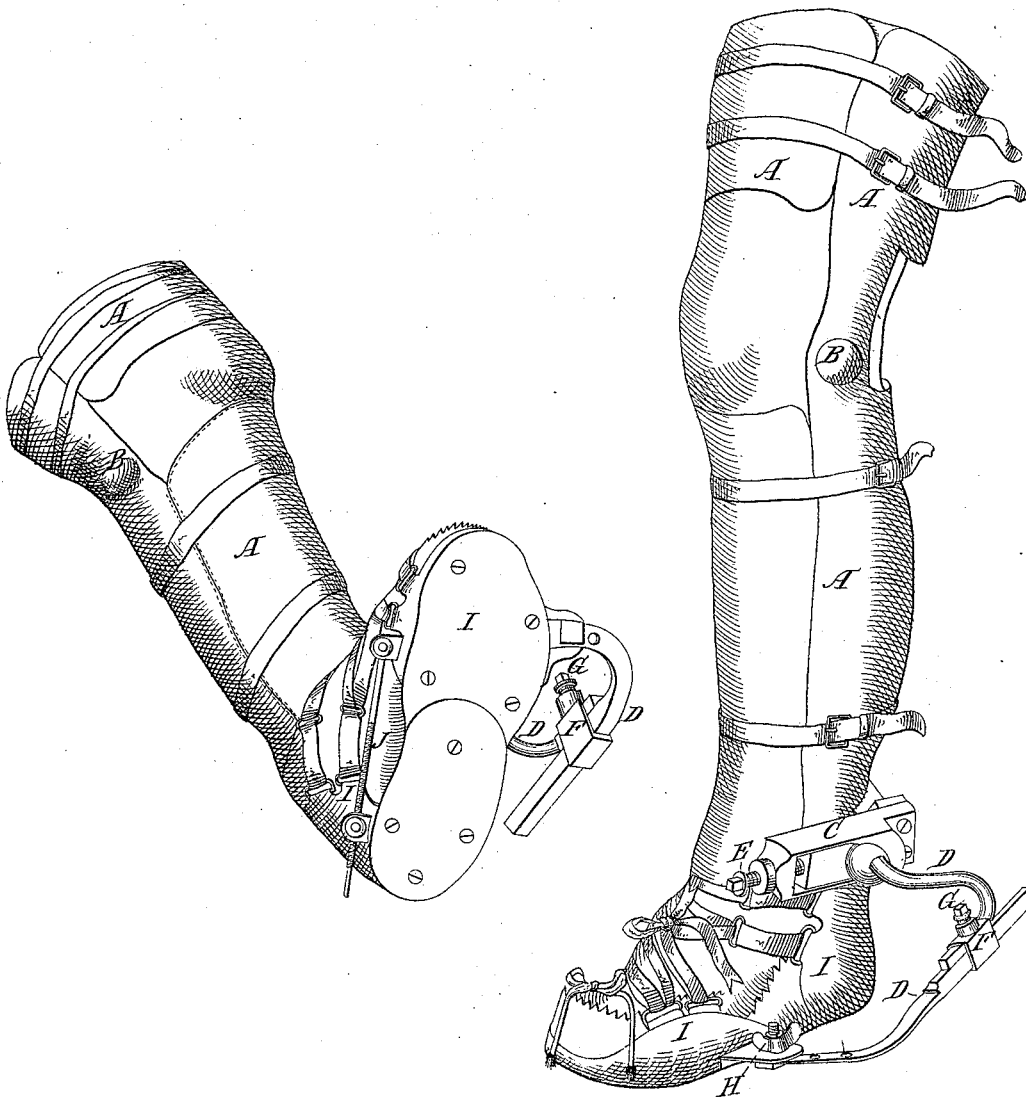


*E. H. Chamberlin,*  
*Treating Deformed Feet.*

*N<sup>o</sup> 5,393.*

*Patented Dec. 11, 1847.*



# UNITED STATES PATENT OFFICE.

E. K. CHAMBERLIN, OF CINCINNATI, OHIO.

## APPARATUS FOR CLUBFEET.

Specification of Letters Patent No. 5,393, dated December 11, 1847.

*To all whom it may concern:*

Be it known that I, EPHRAIM KIRBY CHAMBERLIN, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and Improved Mode for the Reduction and Cure of Clubfeet; and I do hereby declare that the following is a full and exact description.

The nature of my invention is a ball and socket joint apparatus which consists of leg and thigh pieces A in the drawing accompanying this specification composed of thin copper, brass, iron or any malleable metallic plate, fitted accurately to the limb, lined with buckskin or cloth and padded, which pieces are connected at the knee with metallic joints B. At the lower extremity of the leg pieces A is attached firmly a metallic socket C into which works the globular end of a metallic shaft D giving to it the motion of a universal joint. By means of a screw E inserted into the socket C which is placed as near to the external or internal ankle, as can well be, without touching it, the motion of the shaft or arm D, can be made free and universal or firm and immovable according as the screw E the extremity of which touches the ball, is loosened or tightened. The shaft D is in two pieces which are connected together by a band F of brass or other metal through which two extremities of the shaft pass lapping each other. By these means the length of the shaft can be in-

creased or diminished at will and fixed at any required length by turning a screw G that passes through the band F and presses one section of the shaft against the other.

To the lower extremity of the shaft D attached by means of a screw and nut H is a shoe and sandal I made of metal and leather or a leather shoe within a metallic sandal. This sandal is constructed with a lateral joint in its sole so that by means of a screw J (with a rotary attachment at each end) acting at each end of the sandal and on the inside of the foot, the foot when within the sandal may be brought gradually into a straight or natural form. By moving the shaft at its globular extremity or axis, when the shoe is attached to the other extremity and the apparatus applied firmly to the limb the foot may be brought gradually into its natural position and all the motions of the ankle joint given to it or confined in any position.

What I claim as my invention and desire to secure by Letters Patent is—

The application of the ball and socket or universal joint to club foot apparatus including the improved sandal with a joint in its center moved by a screw attached at each of its ends as described above.

E. KIRBY CHAMBERLIN,

Witnesses:

C. SELDEN,  
S. SELDEN,