

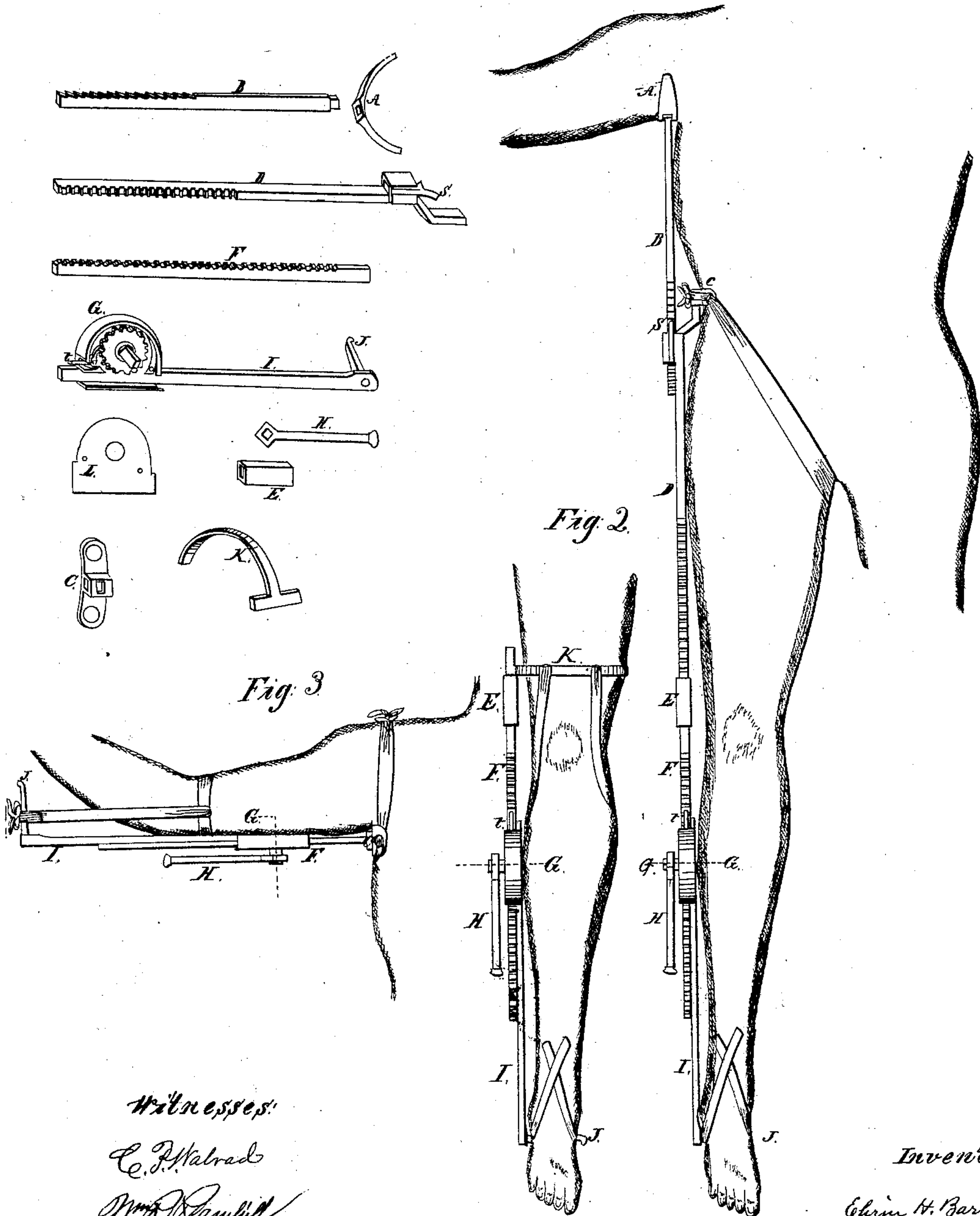
*E. H. Barnes,*

*Fracture Apparatus.*

*N<sup>o</sup> 76,382.*

*Patented Apr. 7, 1868.*

*Fig 1.*



*Witnesses:*  
*C. P. Walbridge*  
*Wm. R. Paulhill*

*Inventor:*  
*Edwin H. Barnes*  
*by D. D. & F. D. Foster*  
*his Atty*

# United States Patent Office.

ELIZUR H. BARNES, OF MARATHON, NEW YORK.

*Letters Patent No. 76,382, dated April 7, 1868.*

## APPARATUS FOR TREATING FRACTURES AND DISLOCATIONS.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN :

Be it known that I, ELIZUR H. BARNES, of Marathon, in the county of Cortland, and State of New York, have invented a new and useful Improvement in Apparatus to be used in Surgical Operations in Reducing Fractures or Dislocations; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this my specification.

The apparatus is composed of a number of pieces, more or less of which will be used, depending upon the part of the body injured or operated upon. These pieces are shown in detail on the left and upper portion of the drawing.

Figure 1 represents the entire apparatus as applied in actual use.

Figure 2, only a part of the apparatus as applied to the lower portion of the leg; and

Figure 3 shows the application of the parts required to the arm.

I is a rod, say, fifteen inches in length, with a movable foot-piece, J, at its lower end, and at its upper end the spur-wheel G working in a case. A catch-spring, *t*, operates upon the cogs to hold them at any desired point. Through the casing of the wheel G, and along the side of the rod I, slides a cogged bar, F, worked up or down by the spur-wheel G. E is a short piece of tubing fitting on to the end of the rod I. Into the upper end of the tube is fitted the curved knee-piece K, as in fig. 2, and which can be used in front of either leg by reversing the ends fitting in the tube. This is bandaged or strapped to the leg, and the foot-piece to the foot. The wrench H is then applied to the shaft of the wheel G, and such tension applied to the limb as the case may require, and this tension is kept up until, by pressure upon the spring *t*, the spur-wheel is left free to move back, and thus lessen or remove the tension.

The same pieces are applied in fig. 3 to the arm, with the exception of the rest, C, which is substituted under the arm, for the tubing E and the curved piece K. This rest, C, is made nearly flat, so as to allow of bringing the arm forward, or extending it directly from the side.

In case of fracture or dislocation of the thigh, fig. 1, the bar or rod D, bent as represented at the upper end, is inserted in the upper end of the tube E, to lengthen out the apparatus, and the form or rest, C, is applied to the upper end, by which it may be strapped to the body. In case the body becomes chafed or sore, or it becomes desirable from other cause, the apparatus may be still further extended by another bar or rod, B, with a rest, A, fitting upon its upper end, and under the arm, this last extension being governed by the ratchet on the rod B, and the spring-catch S, in the case upon the upper part of the rod D. In cases where it may be desirable to use a longer apparatus than is made by the rods I and F, the rod D may be used in place of F.

This apparatus is easily taken apart and put together, light and portable, and being applied to the outer part of the limb or body, may be kept on the patient, and the limb kept in position as long as required.

I make no claim to the parts of this apparatus designated by the letters I, G, and F, separately or in combination with each other; but

I do claim, and desire to secure by Letters Patent—

1. The curved forms or rests K and C, when used, respectively, upon the leg or arm, in combination with the parts I, F, and G.

2. The rod D, when bent as represented at its upper end, in combination with the said parts, I, F, and G, for the purposes set forth.

3. The rod B and rest A, in combination with the parts D, I, F, and L, for the uses and purposes set forth.

E. H. BARNES.

Witnesses:

EDWIN H. BARNES,

A. A. CARLEY.