No. 757,140.

PATENTED APR. 12, 1904.

E. B. NEFFELER.

HIP ADJUSTER.

APPLICATION FILED OCT. 31, 1902.

NO MODEL.

Fig. 1.

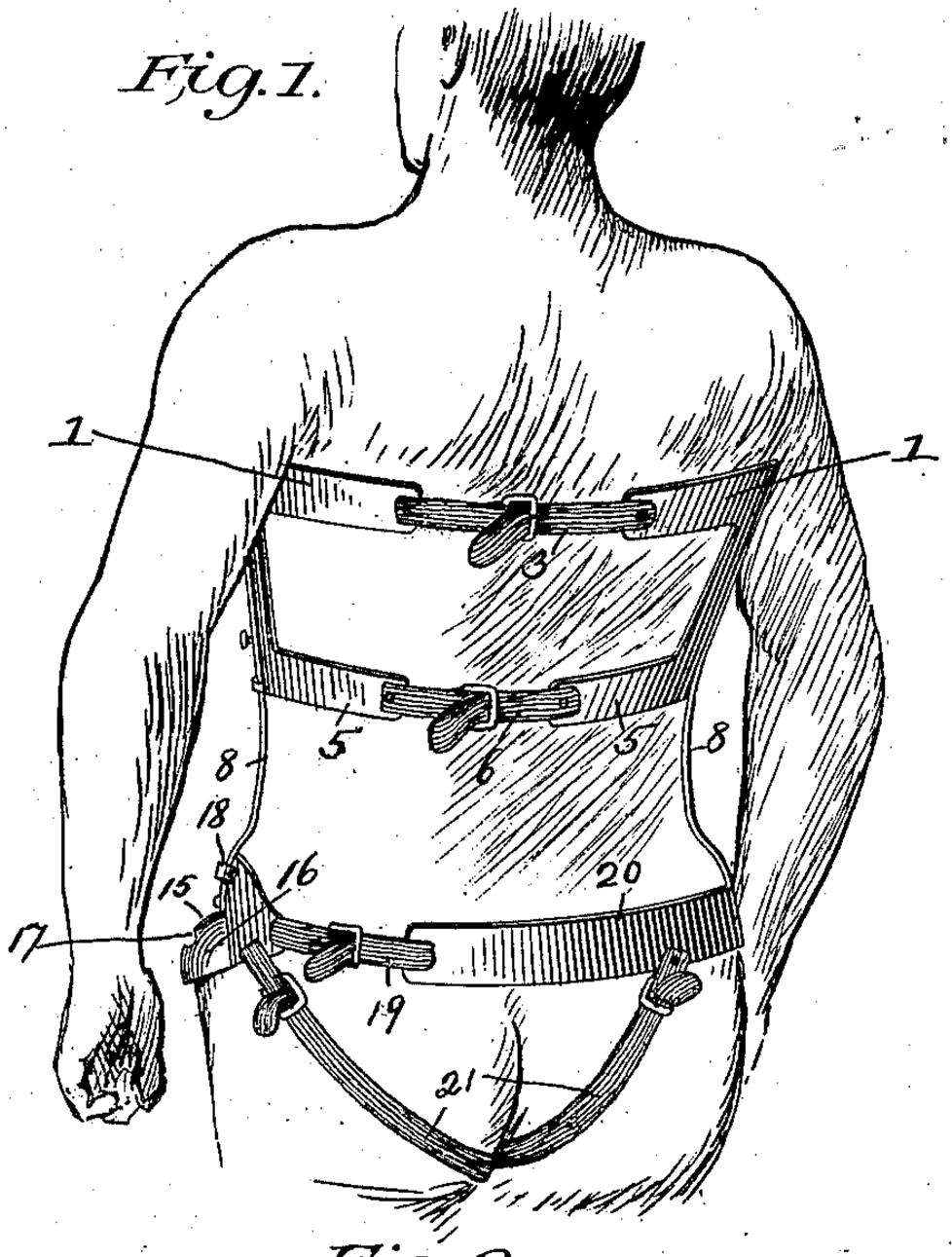
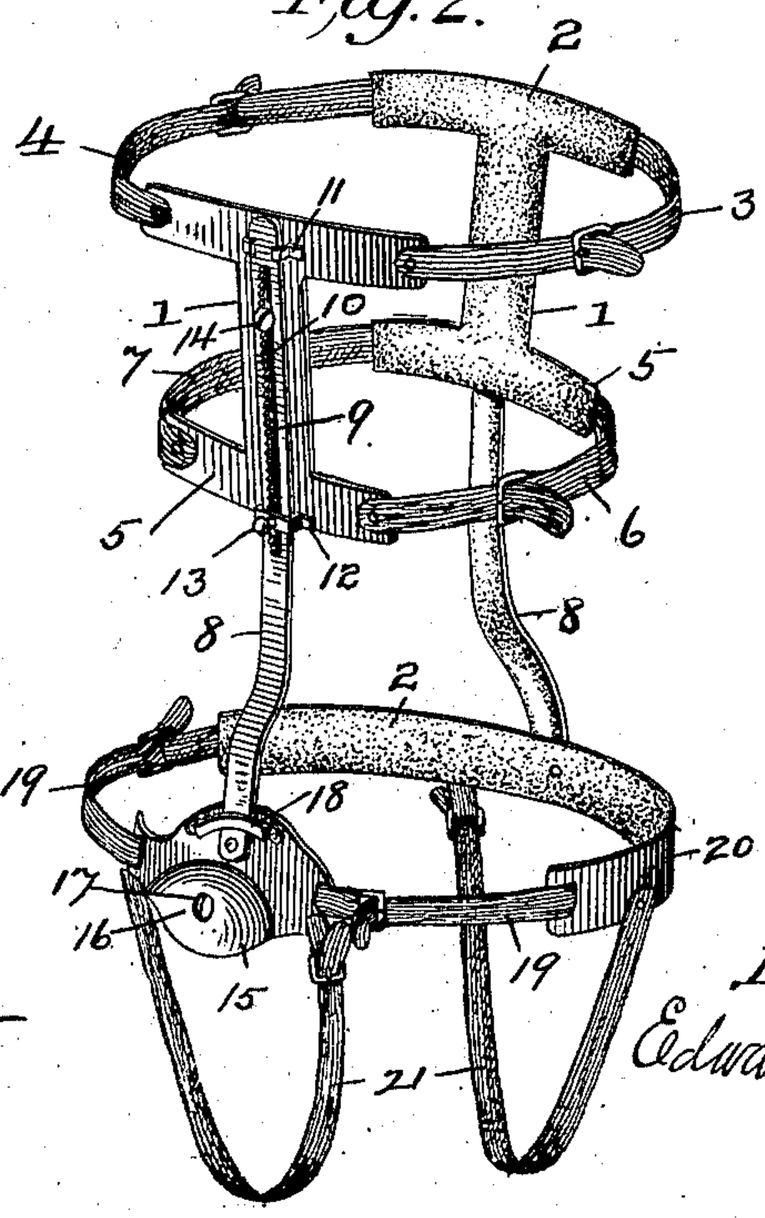


Fig. 2.



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No. 757,140. Patented April 12, 1904.

UNITED STATES PATENT OFFICE.

EDWARD B. NEFFELER, OF ABERDEEN, SOUTH DAKOTA.

HIP-ADJUSTER.

SPECIFICATION forming part of Letters Patent No. 757,140, dated April 12, 1904.

Application filed October 31, 1902. Serial No. 129,561. (No model.)

To all whom it may concern:

Be it known that I, EDWARD B. NEFFELER, a citizen of the United States, and a resident of Aberdeen, in the county of Brown and State of South Dakota, have invented an Improvement in Hip-Adjusters, of which the following is a specification.

My invention relates to hip-adjusters; and the objects of the same are to provide an appliance which may be attached to the human body and properly adjusted to replace dislocated hips or for holding the head of the femur in place and which will permit a free movement of the defective limb or limbs. The devices or appliances heretofore in use for this character of dislocations have generally consisted of a splint extending down the limb and preventing the free use of the limb-muscles. I contemplate the use of an artificial hip-socket, in which the upper end of the femur is firmly supported and held in place without interfering with the free articulation of the joint. I attain these objects by means of the construction illustrated in the accompanying drawings, in which—

Figure 1 is a view illustrating the manner of securing my appliance in place upon a patient and showing the back or rear portion of the appliance. Fig. 2 is a perspective view of my appliance detached from the patient.

The numeral 1 designates a metal frame or support, and, as shown in the drawings, two such frames are used. These frames are padded, as at 2, upon their inner surfaces where they bear against the sides, back, and chest of the patient and at their ends are provided with adjusting straps or bands 3 4. The lower members 5 of the frames 1 are also provided with adjusting-bands 6 7. A splint or bar 8 is adjustably secured to each of the frames 1 by any suitable means. As shown, the splint is slotted, as at 9, and one wall of the slot is provided with rack-teeth 10. The splint is guided in its adjustments by means of the keepers 11 12. The keeper 12 is provided with a key 13, carrying a pinion or ratchet which engages the teeth 10 in the slot. A set-screw 14 may be used for securing the splint in adjusted position.

Pivoted to the lower end of one or both of the splints 8 is a metal hip-socket 15, said socket being designed to fit the end of the femur. It will be understood, of course, that this socket will vary in contour to conform to the various conditions of the dislocated joint. However, the socket will be provided with an outwardly swell or bulging portion 16, having a perforation 17 therein to serve in locating the greater tuberosity of the femur, and a keeper 18 to limit and guide the movement of the splint 8 relatively to the socket. It will also be understood that a socket may be used for either the right or left limb or for both limbs and will be made to conform to the various conditions of the dislocation. Adjusting-straps 19 are secured to the socket and to a padded metal belt 20. Thigh-straps 21 are attached to the socket and to the metal belt 20, as shown in the drawings.

I do not wish to have it understood that I am to be restricted to the exact details shown, as I may resort to such changes as fairly fall within the scope of my invention.

Having thus fully described my invention, what I desire to secure by Letters Patent and claim is—

1. A hip-adjuster comprising a metal hip-socket, having a splint pivoted thereto, and means for adjusting the splint, and securing the same to the body of the wearer, substantially as described.

2. A hip-socket, having a swelled or bulging portion to fit the end of the femur, and means for adjusting and holding the socket in place.

3. A surgical appliance comprising a hip-socket, a belt secured to the socket, a splint pivoted to the socket, and means for securing the splint firmly to the body to support and hold the socket in place.

EDWARD B. NEFFELER.

Witnesses:
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