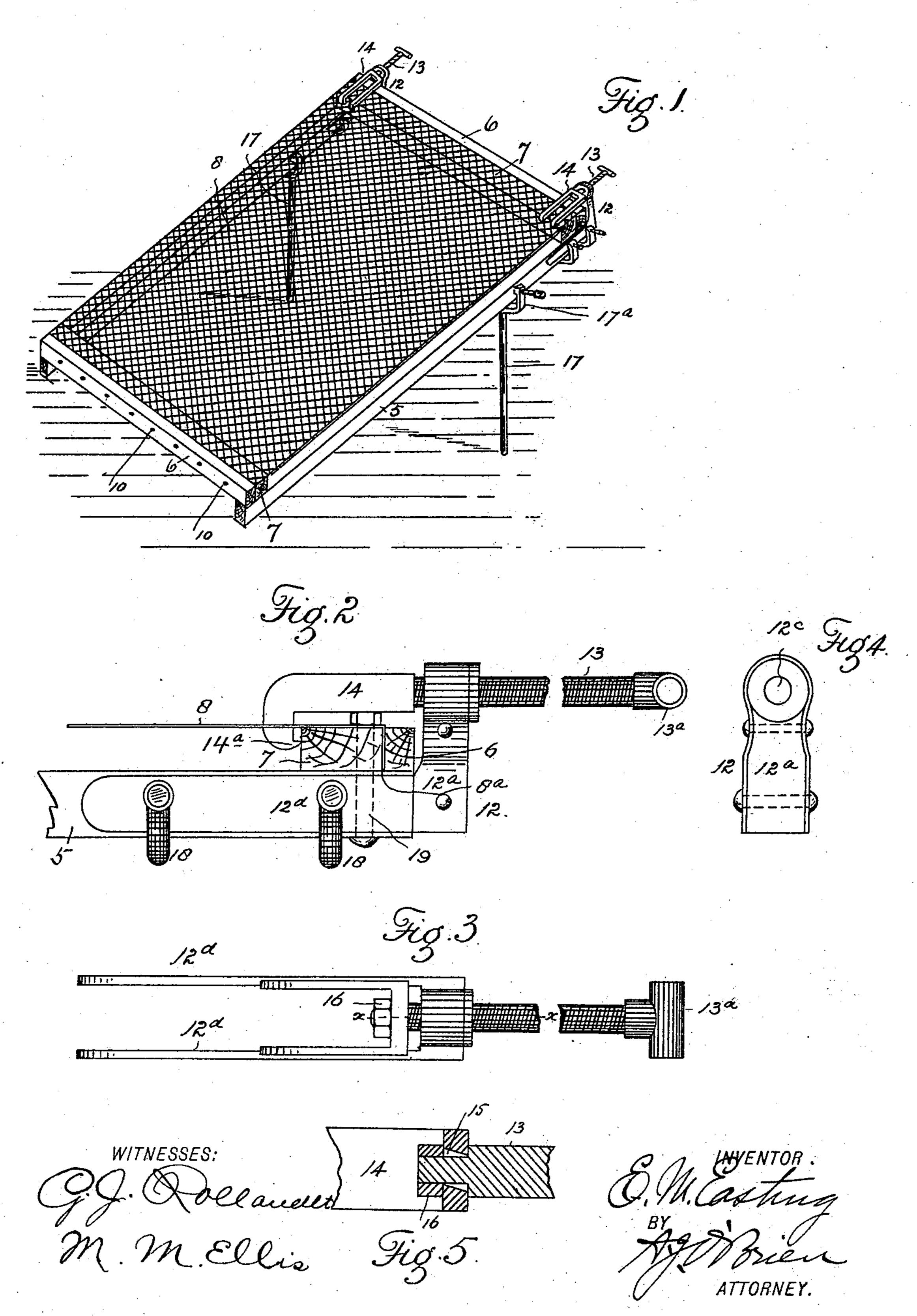
(No Model.)

## E. M. EASTING.

DEVICE FOR TIGHTENING WOVEN WIRE BED SPRINGS.

No. 517,818.

Patented Apr. 3, 1894.



## United States Patent Office.

EUGENE M. EASTING, OF DENVER, COLORADO, ASSIGNOR TO NEIL GENTRY, OF SAME PLACE.

## DEVICE FOR TIGHTENING WOVEN-WIRE BED-SPRINGS.

SPECIFICATION forming part of Letters Patent No. 517,818, dated April 3, 1894.

Application filed December 20, 1893. Serial No. 494, 234. (No model.)

To all whom it may concern:

Be it known that I, EUGENE M. EASTING, a citizen of the United States of America, residing at Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Devices for Tightening Woven-Wire Bed-Springs; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in means for tightening woven-wire bed-springs, and the same consists of the features hereinafter described and claimed, all of which will be fully understood by reference to the accompanying drawings, in which is illustrated

an embodiment thereof.

In the drawings, Figure 1 is a perspective view of a spring in position to be acted on by the tightening devices, which are shown in place. Fig. 2 is a side view of one of the tightening devices, the same being shown on a larger scale, and in position for use. Fig. 3 is a top or plan view in detail of the tightening device. Fig. 4 is an end view with the screw shaft removed. Fig. 5 is a section taken on the line x-x of Fig. 3.

Similar reference characters indicate corresponding parts or elements of the mechan-

35 ism in the several views.

The numeral 5 designates the longitudinal side rails connected at each end by two transverse bars 6 and 7 forming the frame for the woven-wire spring 8. The extremities of the spring are secured between the two sets of end bars as shown at 8° in Fig. 2. The bars 7 are secured to the longitudinal bars by bolts 19; while the bars 6 are nailed or spiked securely to the bars 7, as indicated at 10 in Fig. 1.

The tightening device proper consists of the shoe 12, the screw shaft 13 and the grip swiveled thereon. The shoe has a vertical shank 12<sup>a</sup>, in the upper extremity of which is formed a threaded aperture 12<sup>c</sup> for the reception of the screw shaft 13. From the lower extremity

of the shank 12° project the two arms 12° adapted to receive the side rail 5 of the frame, the arms engaging the rail on either side. The grip 14 is loosely swiveled on the end of the screw shaft as shown at 15 in Fig. 5, and 55 is retained in place by a nut 16. It is preferably bifurcated as shown in the drawings, the two parts terminating at their free extremities in hooks provided with points 14° which project toward the shank of the shoe 6° and are adapted to enter the bar 7 when the screw shaft is so turned as to apply or tighten the grip. As shown in the drawings, shaft 13 is provided at its outer or free extremity with a T 13° fashioned to receive a bar for 65

use in turning the shaft.

In using my improvement, the bed spring to be operated on is placed at a suitable inclination by the use of legs 17 terminating in clamps 17<sup>a</sup> which are attached to the side rails 70 of the frame in such a manner as to raise one end of the spring a sufficient distance from the floor to make it convenient for the workman. Two of the devices are then applied to the raised extremity of the frame, one being 75 slipped over the end of each side rail and made fast by the use of screw clamps 18 which are employed to tighten the arms 12d upon the rails' sides, the ends of the rails being in engagement with the shoe 12. The swiveled 80 grips 14 are placed in the position shown in Fig. 2., The screwshafts 13 are then so turned as to draw the swiveled grips toward the shoe, thus pressing sufficiently hard upon bar 7 to relieve the bolts 19 from their function of 85 holding said bar in place. These bolts are then removed and the screw shafts so turned as to release the grip, thus allowing the spring to contract to the fullest extent, whereby it becomes perfectly loose. The workman then 90 cuts the spring transversely at a suitable distance from bar 7, this distance being determined according to the looseness of the spring, and consequently, the width of the piece to be removed. The bars 6 and 7 are then sepa- 95 rated, and the severed pieces removed. The free extremity of the spring is then secured between bars 6 and 7 after which the tightening devices are again applied and bar 7 drawn backward to its original position. The 100 bolts 19 are then inserted and fastened, when I the work is complete.

Having thus described my invention, what I claim is—

In a tightening device for woven-wire bedsprings, the combination of the shoe composed of the shank having a threaded aperture, and the arms to receive the rail, and a screw shaft inserted in the aperture of the shank and car-

rying a hooked grip swiveled on one extremity to thereof, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

EUGENE M. EASTING.

Witnesses:

J. E. GREGG,

J. D. MAHON.