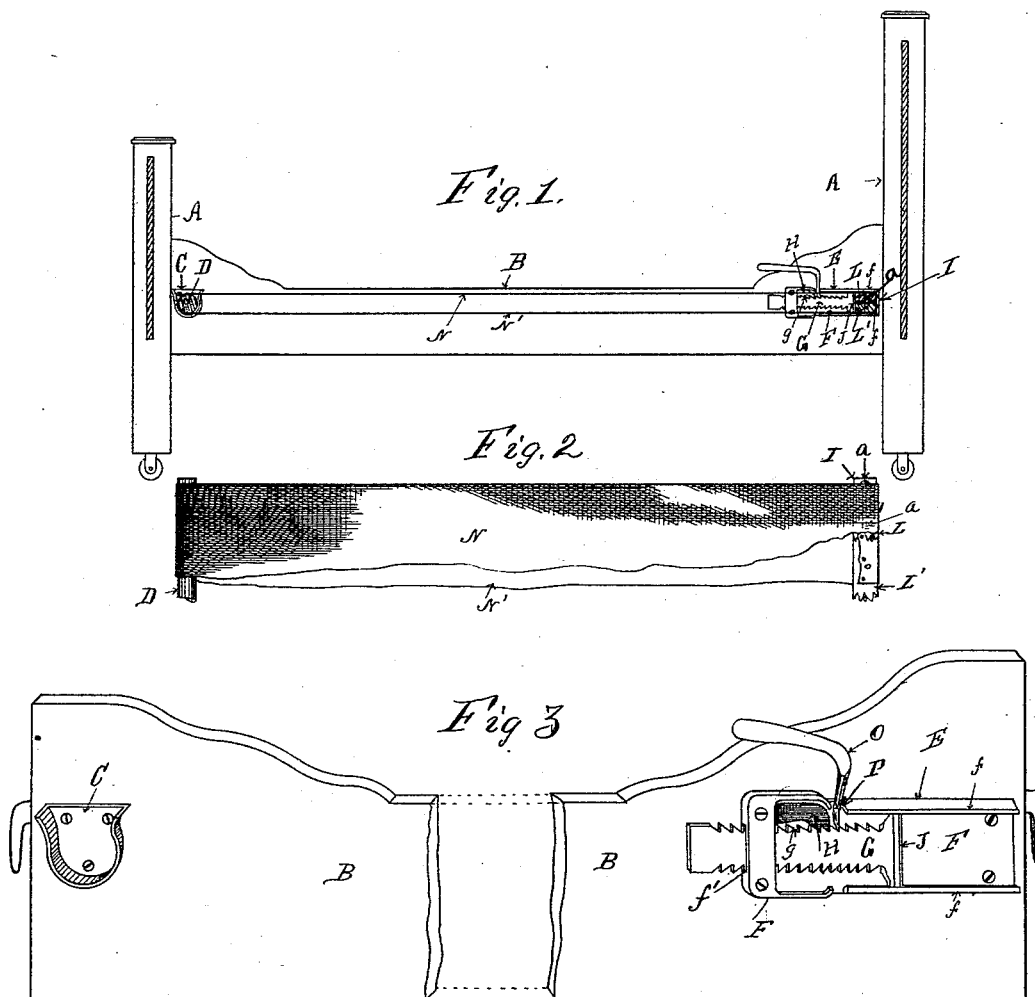


(No Model.)

J. J. LOOMIS.
BED BOTTOM STRETCHING MECHANISM.

No. 420,304.

Patented Jan. 28, 1890.



Witnesses.
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UNITED STATES PATENT OFFICE.

JOHN J. LOOMIS, OF NORTH EAST, PENNSYLVANIA.

BED-BOTTOM-STRETCHING MECHANISM.

SPECIFICATION forming part of Letters Patent No. 420,304, dated January 28, 1890.

Application filed March 22, 1889. Serial No. 304,854. (No model.)

To all whom it may concern:

Be it known that I, JOHN J. LOOMIS, a citizen of the United States, residing at North East, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Bed-Bottom-Stretching Mechanism; and I do hereby 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 letters of reference marked thereon, forming part of this specification.

My invention consists in the improvements in stretching mechanism for bed-bottoms hereinafter set forth and explained, and illustrated in the accompanying drawings, in which—

Figure 1 shows a central longitudinal section of a bedstead and bed-bottom embodying my invention. Fig. 2 shows a section of a web forming the bed-bottom. Fig. 3 shows a bedstead-rail (the central portion thereof being broken away) with my stretching mechanism secured to the ends thereof.

Like letters refer to like parts in all of the figures.

The objects of my invention are to construct stretching mechanism for canvas bed-bottoms adapted to be secured to the side rails of a bedstead, and also a sectional cross-bar to which the ends of the canvas web are secured, and which serves as a support for one end of the bed-bottom.

In the construction of my invention shown, A represents a bedstead, and B the side rails thereof. On the inside of the rails B, at one end, I secure sockets C, adapted to receive a roller D, reaching from the socket C on one side rail to a like socket C on the inside of the rail B on the opposite side of the bedstead. At the other ends of the rails B, I secure the stretching mechanism E, which consists of the plate F, having longitudinal flanges *ff* thereon, between which flanges *ff*, I place a longitudinally-sliding rack-bar G, which is adapted to be moved along between the flanges *ff* and secured from backward movement by means of a dog H, pivoted to the plate F, which dog H engages with the teeth *g* in the

rack-bar G, so as to retain the rack-bar G at any point desired. The front end of plate F is provided with a hole *f'*, through which the said bar G passes, so that the bar is guided by said hole and by the flanges *f*, which come in contact with the rack-bar end J. I secure one of these stretchers E to the inside of each bed-rail opposite to each other, so that a square cross-bar I will extend across the bedstead, resting between the flanges *ff* and supported upon the lower one, so that the ends J of the rack-bars G engage with the ends of the cross-bar I when in place, whereby the rack-bars G may be operated to force the cross-bar I toward the outer ends of the flanged plates F. This cross-bar I, I make in two longitudinal sections L L' and bring the end of the upper fold N of the web over the top and around to the under side of the section L thereof, where it is secured to the under side of said section by means of tacks or any other convenient means, and I then bring the end of the lower fold N' of the web around under the section L' of the cross-bar and up around and on the top of the lower section L', where it is also secured by means of tacks or in any other convenient manner. The upper and lower sections L and L' are then secured together by means of screws *a*, which firmly clamp the two sections of the cross-bar together.

In operation, the web N N' having been secured to the cross-bar I, as hereinbefore described, the rack-bars G are moved back and the ends of the bar I inserted between the flanges *ff* on the plates F. The roller D, being also inserted in the fold formed between the upper and lower portions N and N' of the web, is placed in the supporting-sockets C at the opposite end of the bed-rails B. A pinch-bar O is then inserted in the slots P at the inner ends of the flanges *ff*, where it engages with the teeth *g* of the rack-bars G, by means whereof the rack-bars G are moved, forcing the ends of the cross-bar I backward a sufficient distance to stretch the web N N' as tightly as may be desired, where the dogs H, engaging with the teeth *g*, secure it. It will be observed that in this operation each end of this cross-bar I is moved independently of the other, so that the bed-bottom can be stretched so as to be even regardless of the

fact that the web may not have been secured evenly to the cross-bar I. In this manner I overcome the difficulties experienced in the use of ratchet-roller bed-bottom-stretching mechanism, which stretches the whole width of the web alike; also, in the use of the sectional cross-bar I, I am enabled to take up any excessive length of web without removing the nails with which it is fastened, as by removing the screws *a*, securing the sections L L' thereof together, I can roll the end of the web one or more times around one of the sections of the bar I and again insert the screws *a*, securing the sections together. In this way I overcome the necessity of taking out the fastening-nails and again replacing them.

Having thus fully described my invention, so as to enable others to construct and use the same, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination, with the side rails, of the stationary sockets secured to one end of said rails, the stationary plates secured to the opposite end of the side rails and provided with guide-flanges *f*, the slots P in said guide-

flanges and the holes *f'*, the sliding rack-bars guided by said holes and flanges, the pinch-bars adapted to fulcrum against the edges of slots P and to engage with the rack-bars, and retaining-dogs pivoted to the said plates and engaging with the rack-bars, substantially as and for the purpose set forth.

2. The combination, with the side rails, of the stationary sockets secured to one end of said rails, the round bar D, journaled in said sockets, the rectangular bar formed in two parts L L', the web N, passing around said bars and having its ends secured between the said halves L L', and the stationary plates provided with guide-flanges *f*, for supporting the ends of the rectangular bar and ratchet mechanisms attached to said plates, whereby the web may be stretched, substantially as set forth.

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

JOHN J. LOOMIS.

Witnesses:

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