

J. W. C. PETERS.

STRETCHING ATTACHMENT FOR WOVEN-WIRE MATTRESSES.

No. 173,333.

Patented Feb. 8, 1876.

Fig 1

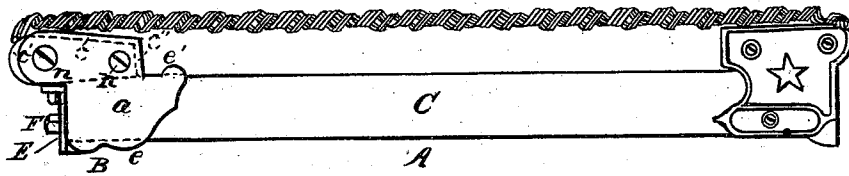


Fig. 2

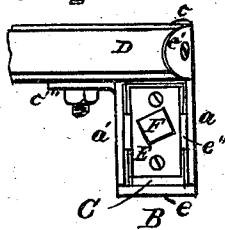


Fig. 3

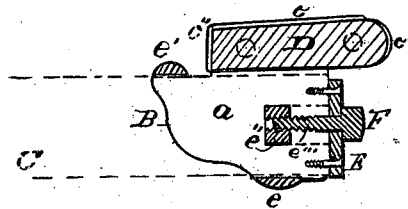


Fig. 4

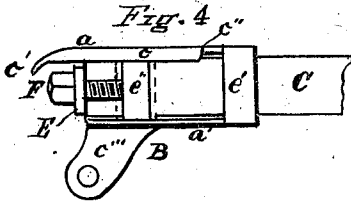
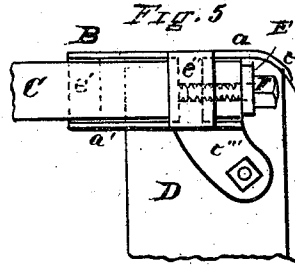


Fig. 5



WITNESSES

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J. WILLIAM C. PETERS, OF CHICAGO, ILLINOIS, ASSIGNOR TO WHITTLESEY & PETERS, OF SAME PLACE.

IMPROVEMENT IN STRETCHING ATTACHMENTS FOR WOVEN-WIRE MATTRESSES.

Specification forming part of Letters Patent No. **173,333**, dated February 8, 1876; application filed October 6, 1875.

To all whom it may concern:

Be it known that I, J. WILLIAM C. PETERS, of Chicago, in the county of Cook and State of Illinois, have invented a new, useful, and Improved Stretching Attachment for Tightening Woven-Wire Mattresses, and for similar purposes, of which attachment the following is a full, clear, and exact description, which will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawing forming a part hereof, and in which—

Figure 1 represents a side elevation of a bed-bottom, provided with a woven-wire mattress, and with my improved stretching attachment. Fig. 2 represents a rear elevation of the attachment. Fig. 3 represents a vertical central section thereof. Fig. 4 represents a top or plan view of the same; and Fig. 5 represents a bottom view.

Like letters of reference indicate like parts.

It is very desirable that at least one of the rails of bed-bottom frames, provided with woven-wire mattresses or other elastic supporting fabric, should be adjustable in order that the fabric may be thereby tightened from time to time, if necessary. My object is to make a device whereby this result may be accomplished with facility; and to that end my invention consists of a stretching-plate, substantially as hereinafter set forth.

In the drawing, A represents a bed-bottom, consisting of a frame formed by means of side and end rails, and of a woven-wire fabric or mattress attached to the latter rails, which are arranged, in the example shown, over the side rails. In order to stretch the fabric it is only essential that provision be made for the adjustment of one of the end rails; and B B are plates employed both for the purpose of connecting this rail firmly to the side rails, and for adjusting the end rail so as to tighten the fabric. The plates B B each consist of two vertical faces, *a* and *a'*, arranged sufficiently apart to receive one end of one of the side rails C. The faces *a* and *a'* are connected to each other by means of the cross-bars *e* and *e'*, one arranged to receive the lower edge of the side rail, and the other the upper edge.

e'' is a cross-bar connecting the central parts of the faces *a* and *a'*, and the end of the side rail is cut away to receive the bar *e''*, as represented at *e'''*. The plate projects upwardly sufficiently to receive the end rail D, and is flanged at the top, rear, and front sufficiently to prevent the upward and rearward and forward movement of the rail, as shown at *c*, *c'*, and *c''*. The plate *a* is provided with a flange, *c'''*, arranged for contact with the bottom of the rail D. The parts of the plates now described are cast in one piece. E is a separate plate, lying across the cut *e'''*, and attached to the rear end of the side rail by means of screws or otherwise. F is a headed screw pin or bolt, passing freely through the plate E, and entering a female screw in the bar *e''*.

In order to unite the side rails with the adjustable end rail by means of the stretching attachment now described, the plates B B should be firmly fastened to the end of the end rail, which is to be adjustable. To fasten these parts together screws *n n*, passing through the plate *a* and into the ends of the end rail, may be employed in connection with a bolt and nut passing through the same rail, and also through the flange *c'''*. These fastenings, in connection with the flanges or overlapping lips already referred to, will fasten the parts firmly together. The side rails are then inserted into the plates B B as far as the bar *e''* will permit. The plate E and screw F may then be arranged in their proper places.

In order to tighten the fabric it is only necessary to turn the screws F F in such a direction as to draw the plates B B toward the ends of the side rails. By this means the adjustable end rail, to which the fabric is attached, will be carried from the fixed end rail, to which the fabric is also attached, and hence the latter will be tightened. The fabric may be loosened, if necessary, by turning the screws in the reverse direction. The cross-bars *e* and *e'* effectually prevent the plates B B and the adjustable end rail from being tilted, however tight the fabric may be.

It will be perceived from the foregoing description that the plates B B are horizontally adjustable on the side rails, and rigidly attached to the adjustable end rail, and these

features, in connection with the herein-described means of producing such adjustment, constitute the essential elements of this invention, independently of any particular method of fastening the said plates to the adjustable bar, for, so long as these plates are firmly enough connected to the end bar to prevent it from being drawn forward accidentally by the tension of the fabric, it is immaterial what means is employed to effect this attachment, provided the action of the adjusting parts is not thereby interfered with.

It is evident that the fabric, when applied to the frame, will prevent the rearward movement of the end bar, unless the plates B B are drawn in that direction for the purpose of tightening the fabric. In the example shown the rear corners of the adjustable bar are rounded, and I have so formed the plates B B as to cover these rounded parts or corners merely to protect them and furnish a better finish, and to help keep the adjustable bar in place before the fabric and the fastening devices are applied; but these round corners are not essential.

It is also obvious that when the plates B B are mounted on the side rails, and fastened to the adjustable rail or bar by screws or bolts, in the manner described, the said bar cannot be drawn forward accidentally by the tension of the fabric so long as the plates B B are held in place by means of the screw or bolt F and the cross-bar *e''*, and that the latter, independently of the bars *e* and *e'*, will prevent the plates B B

and the adjustable bar from being tilted forward. I deem it preferable, however, to employ these flanges or lips and the bars *e* and *e'*, in connection with the bolt and screws which enter the adjustable bar, in order that the strain upon the said bolt and screws may be thereby relieved. When the strain is thus relieved the fastening devices which enter the adjustable bar need only perform the function of preventing the plates B B from slipping laterally from the said bar. But as various means may be employed for the purpose of connecting the adjustable bar to the plates B B without interfering with the adjustment of the latter in the manner herein described, I do not here intend to limit myself to the herein-described means of fastening the said bar to these plates; but

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

The horizontally sliding or adjustable plates B B, mounted freely on the side rails, and carrying the end rail, and consisting of the vertical parts *a* and *a'*, united by means of the cross-bar *e''*, having a female screw therein, in combination with the end plate E, and the screw pin or bolt F, substantially as and for the purposes specified.

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Witnesses:

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N. C. GRIDLEY.