2 Sheets—Sheet 1.

F. C. EASTMAN.

Bed-Bottom.

No. 207,800. **Patented Sept. 10, 1878.**

Fig. 1.

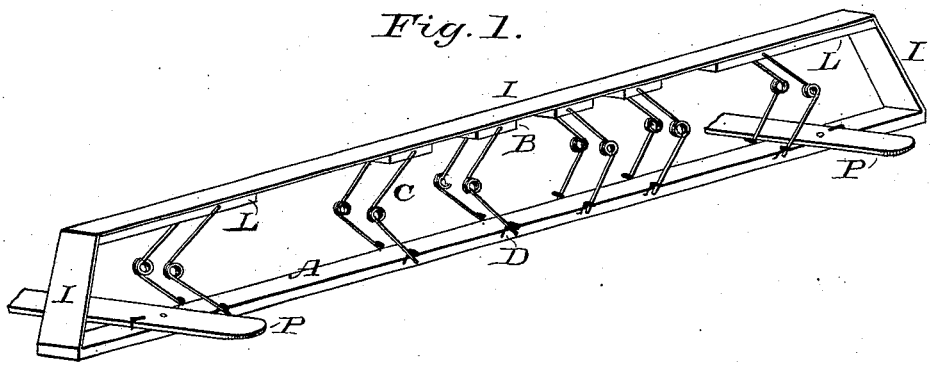


Fig. 3.

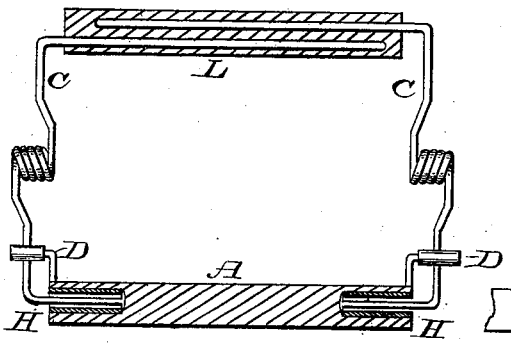


Fig. 2.

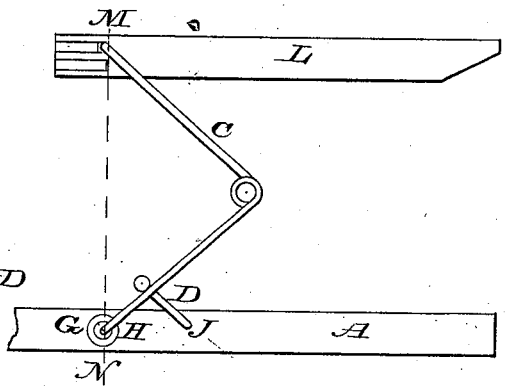


Fig. 4.

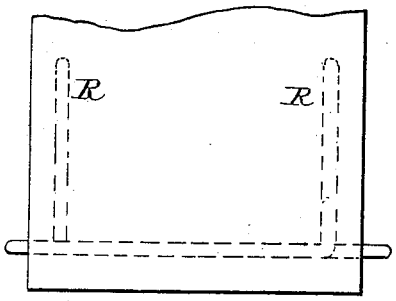
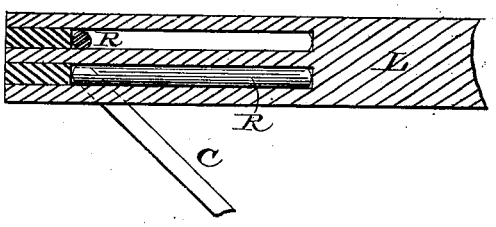


Fig. 5.



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Franklin C. Eastman

2 Sheets—Sheet 2.

F. C. EASTMAN.

Bed-Bottom.

No. 207,800. Patented Sept. 10, 1878.

FIG. 7.

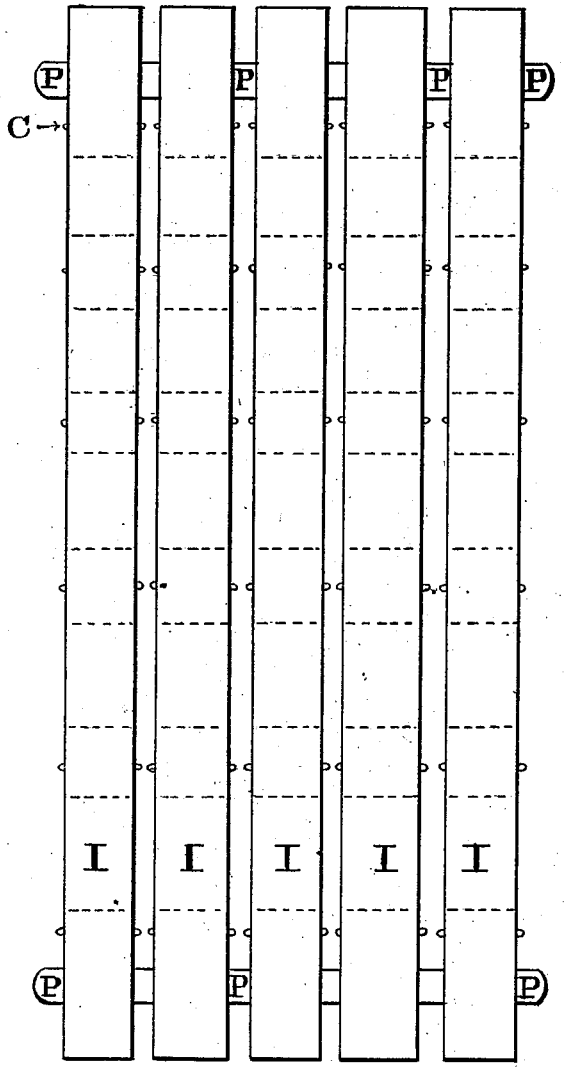
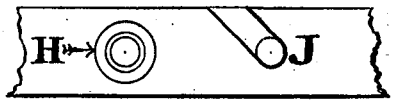


FIG. 6.



WITNESSES.

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FRANKLIN C. EASTMAN, OF CAMBRIDGEPORT, MASSACHUSETTS.

IMPROVEMENT IN BED-BOTTOMS.

Specification forming part of Letters Patent No. **207,800**, dated September 10, 1878; application filed March 18, 1878.

To all whom it may concern:

Be it known that I, FRANKLIN CRAM EASTMAN, of Cambridgeport, county of Middlesex, State of Massachusetts, have invented Improvements in Spring-Beds, of which the following is a specification:

Figure 1 is a perspective view of one slat and its attachments complete. Fig. 2 is a side elevation of one end of a slat and its attachments. Fig. 3 is a cross-section of same through line M N of Fig. 2. Fig. 4 is a plan of the inner end of one of the end blocks, showing by dotted lines the course the upper ends of the springs take in the wood. Fig. 5 is a side view of same enlarged, with part of side removed to show the direction the upper end of one of the springs takes in the block. Fig. 6 is a detail view. Fig. 7 is a plan view of the independent sections arranged complete in a bed.

Similar letters of reference indicate like parts.

My invention is an improvement on the spring-beds now in use in which two-legged springs are arranged between supporting-bars below, and spring bars, or blocks, or canvas covers above; and my object is to overcome many defects in such spring-beds, some of which defects are that the springs easily tip over sidewise, and then wear out very rapidly the mattress or bed placed upon them.

Again, in beds which have springs distributed about the center, the springs being covered with canvas or cloth rigidly fastened to the sides and ends, the center sinks lower when any one is on the bed than the sides, and if one person is heavier than another in the same bed the lighter person must gravitate toward the heavier person. In other beds which have slats hung by springs at each end, as also in the woven-wire mattress, the whole is hung at the ends, which causes it to sag in the center, the body, in consequence, being lower than the head or feet.

I have endeavored to remedy these and other defects by my present invention, which combines the following advantages: First, it conforms to the shape of the body in any conceivable position; secondly, by reason of the independence of each series of springs of all the rest, the weight or position of one person does not in any way influence or alter the natural position of another person in the same bed; thirdly, it is very light, and one person can easily take it apart for dusting, cleaning, &c., and there are no places to harbor vermin; fourthly, the springs working in cloth or against cloth, when they come in contact there is no chance for a creaking noise. It is in consequence perfectly noiseless.

It consists of the combination and arrangement of parts which I will now proceed to describe, reference being had to the accompanying drawings, which form part of this specification.

My invention consists of a number of slats, A, the number varying according to the width of the bed. In each edge of the slats A, near the points G, where the springs are to be attached thereto, is a hole, into which is pressed, glued, or otherwise fastened a wooden tube, H, lined with cloth, in which one end of a V-shaped spring, C, is fastened by heading the end of the wire after the wooden tube has been placed thereon and before the tube is inserted into the hole in the slat. The spring C may be coiled around several times in the angle or center, to give greater elasticity and strength to it, and the upper end of the spring C is secured in a similar manner to a block of wood, B, the block at each end being longer, and marked L. The blocks B and L are held in position over and perpendicular to the lower end of the spring by means of a webbing, I, which is fastened to one end of the slat A, thence passes upward and over the end block, L, and along over the blocks B and the block L at the other end, thence downward, where the end is secured to the other end of slat A. The blocks B and L are glued or otherwise fastened to the webbing I.

The above-named method of attaching the springs may usefully be employed in beds in which a slat is used in place of the before-mentioned webbing and blocks.

I have arranged the springs in pairs, and the several pairs attached to each slat in a series thereupon between the slat below and the webbing above, the said springs ranging lengthwise or thereabout of the slat, whereby each slat, together with its webbing and its series of

springs, constitutes a system entirely independent of all the rest, and a depression of one series does not depress either adjoining series.

I have also arranged the springs C a little closer together toward the head end, so there will be more strength where the heaviest part of the body comes.

In the edge of slat A, at or near a point marked J, is a hole and a slot leading from said hole to the upper face of the slat at an angle of about forty-five degrees. Into the hole at J and the slot leading from it is driven a wire, D, which extends a short distance above the top of slat A, thence turns outward at right angles to the edge of slat A, as seen in Fig. 3, and it projects far enough to act as a stop or check to the spring C, and, being embedded in the slot, it is kept from revolving in the perforation J.

Where the spring C comes in contact with check D cloth is placed to prevent friction or noise.

By placing springs at each edge of the slats and securing them thereto and to the blocks above, by their ends bent horizontally into said parts, the action of the springs is kept nearly vertical, and sagging or tipping over to one side, which is common with single springs, is prevented, and that without necessity of lateral connection or support of one series from another.

The blocks B, being small and pivoted to the spring in the center, are easily held in position; but the longer blocks L at each end have a tendency to fall down at the outer end. To prevent this and give elasticity to the board L for its entire length, I have embedded the end of spring C in the inner end of L and bent the ends of the wires R backward on a line parallel to the face of the block, as shown in Figs. 4 and 5.

To hold any number of slats A securely in position, a strap of wood, P, is placed at each end, and fastened thereto by any convenient fastening, as a screw, staple, &c.

It will be obvious that my series of slats and springs may be arranged crosswise of the bedstead without departing from the spirit of my invention.

A material advantage of the construction of my spring bed-bottom in sections, each independent and complete in itself, is that by simply removing the supporting-rails the bed may be packed for transportation in somewhat less than half the compass which it occupies when set up for use. Its advantages, therefore, over spring bed-bottoms that are all in one wide bulky construction are apparent.

I claim as my invention—

1. In a bed-bottom, the combination of a continuous slat, A, the independent springs C, the blocks B L, and continuous webbing-strip, the slats being provided with tubes H, having a lining which receives the wire of the spring, as and for the purpose set forth.

2. In combination with slats A and springs C, the check-wires D, as described.

3. In combination with the block L, the spring C, having its upper end bent to enter the edge of the block, and again bent in the same plane therewith and parallel with its length, whereby the outer end of said block is supported as desired.

FRANKLIN C. EASTMAN.

Witnesses:

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