O. H. Weed

Bed Bottom.

No. 68,268. Patented Aug. 27, 1867.

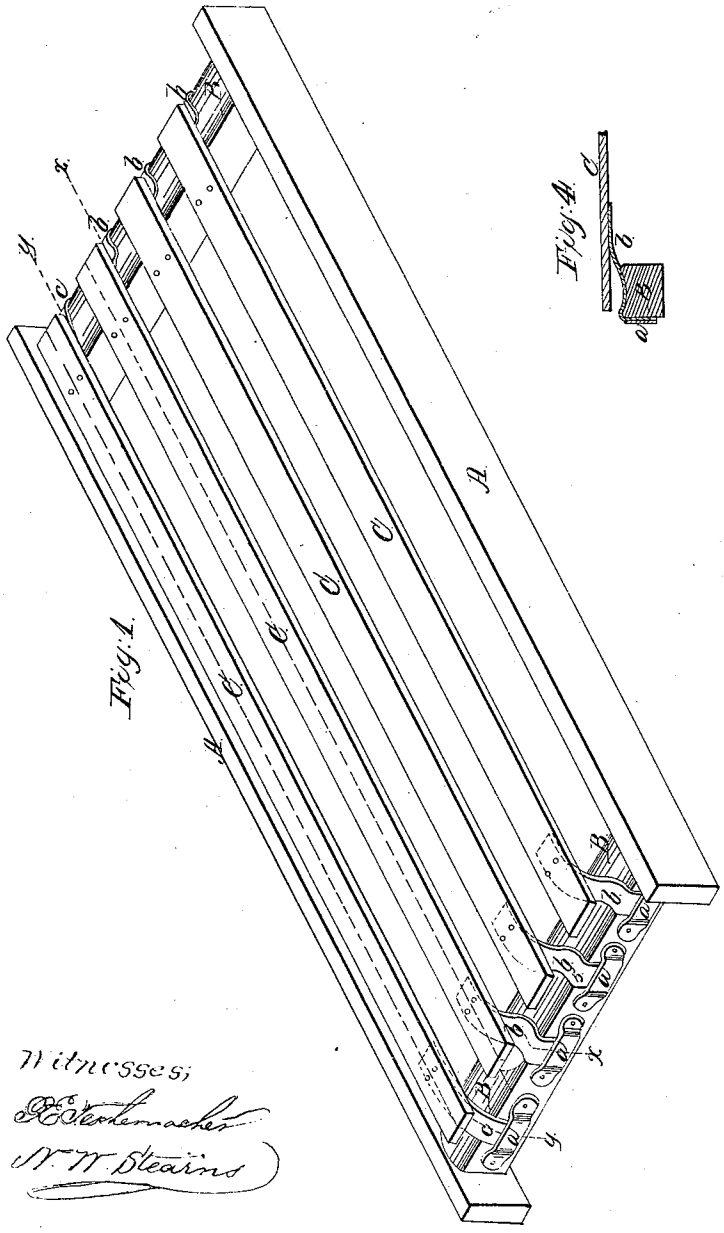

Fig. 1.

Fig. 4.

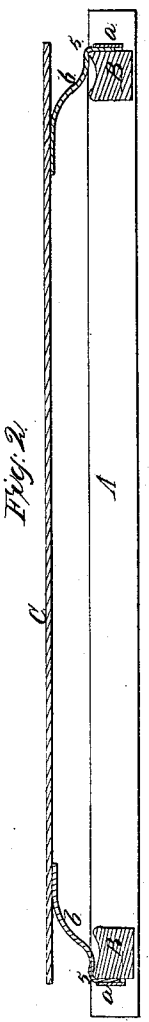

Fig. 2.

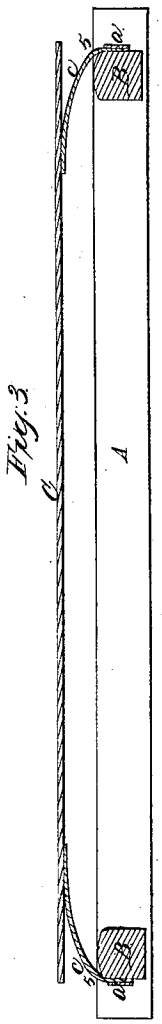

Fig. 3.

Witnesses;
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OTIS H. WEED, OF CHARLESTOWN, MASSACHUSETTS.

Letters Patent No. 68,263, *dated August* 27, 1867.

IMPROVED SPRING-BED BOTTOM.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, OTIS H. WEED, of Charlestown, in the county of Middlesex, and State of Massachusetts, have invented certain improvements in Spring-Bed Bottoms, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view of my improved spring-bed bottom.

Figure 2 is a section on the line *x x* of fig. 1.

Figure 3 is a section on the line *y y* of fig. 1.

Figure 4 is a detail to be referred to.

In bed-bottoms as heretofore constructed, where the slats have been supported by flat springs attached to them and to the rails, the form and arrangement of the springs were such as to bring the slats nearly to a level with the rails, in consequence of which the slats could not be made longer than the distance between the rails, as they would otherwise come into contact with them on being depressed, thus necessitating the employment of cross-bars to support the ends of the mattress beyond the rails. Furthermore, these springs were liable to break at their weakest points on pressure being applied, as they were unsupported except at their points of attachment, and if bent up into such a form as to support the slats at a greater height above the rails, they would require to be made of very heavy steel in order to render them steady and prevent them from breaking.

My invention has for its object to overcome these difficulties, and consists in the peculiar form of the springs in connection with that of the upper surface of the rails to which they are attached, so that on pressure being applied to the springs they will commence to bear at their weakest points upon the rails, and as the pressure is increased will continue to bear still further upon them until they come into contact with their entire upper surface, so that the greater the pressure the more the support afforded to the springs, which are thus prevented from breaking; and with this arrangement of springs the slats are supported at such a height above the rails that they may be made to extend beyond them without any liability of their coming into contact therewith, and thus serve to support the entire length of the mattress without necessitating the employment of the cross-bars heretofore used for supporting the ends of the mattress beyond the rails.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawings, A represents the side pieces of the bed-bottom, B the rails, to the outside of which are secured the plates *a*, which are of such a shape as to form sockets for the reception of the lower ends of the springs *b c*, the opposite ends of which are secured to and serve to support the slats C. The upper surface of each of the rails B beneath the springs *b* is grooved or hollowed out longitudinally, so as to correspond with the form of the springs, and thus, as the slats are depressed by a weight placed upon them, the springs commence to bear upon the rails at their weakest points, (5,) and continue to bear more and more, in proportion as the pressure is increased, until they rest upon nearly the entire upper surface of the rails, as seen in fig. 4; and it will be seen that the greater the weight placed upon the slats the more will be the support afforded to the springs, by which they are prevented from breaking at their weakest points, and I am thus enabled to employ springs made of light steel. One of the slats, figs. 1 and 3, is represented as provided with springs *c*, of a form differing somewhat from that of the springs *b*, above described; but it will be seen that the portions of the rails B beneath are rounded on their upper surface to correspond with the form of the springs, so that on pressure being applied the springs *c* will be supported in a similar manner to the springs *b*, the effect being precisely the same in both cases. I do not, therefore, confine myself to the exact form of springs shown, as they may be varied, if desired, the form of the upper surfaces of the rails in all cases being made to correspond therewith, so as to afford the desired support. The springs *c* are better adapted for children's or single beds, where they are not subjected to a great weight, and where a light spring is required.

By means of the above-described construction and arrangement of springs, the slats are supported at such a height above the rails that they may be made to extend beyond them without any liability of their coming into contact therewith, and thus serve to support the entire length of the mattress without the employment of the cross-bars heretofore used to support the ends of the mattress beyond the rails. It will be seen that the

ends of the springs *b c* are merely placed in the sockets formed by the plates *a*, which are bent or cast with shoulders to confine the ends of the springs securely in place, this method of attaching the springs with the slats to the rails being exceedingly simple, and rendering it easy for any person to put them in place or remove them, as may be required.

Claim.

What I claim as my invention, and desire to secure by Letters Patent, is—

The slats C, so lengthened as to rest upon the springs *b* or *c*, and extending the whole length of the bedstead, in combination with the springs *b* or *c* passing over the rail, and supported by the same, to which they are attached by means of the removable and detached plates *a*, all substantially as described and for the purpose set forth.

I also claim attaching the springs of the bed-bottoms to the rails by means of the removable and detached plates *a*, substantially as described.

OTIS H. WEED.

Witnesses:

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