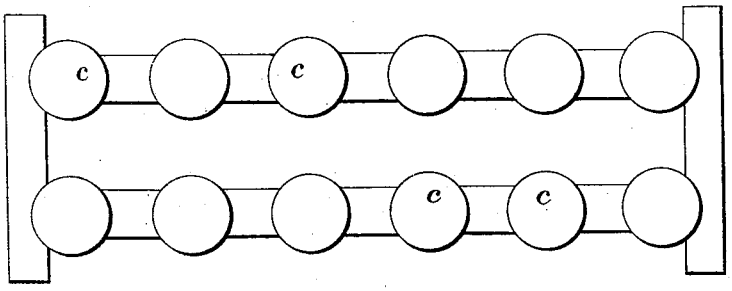
J. E. Todd,

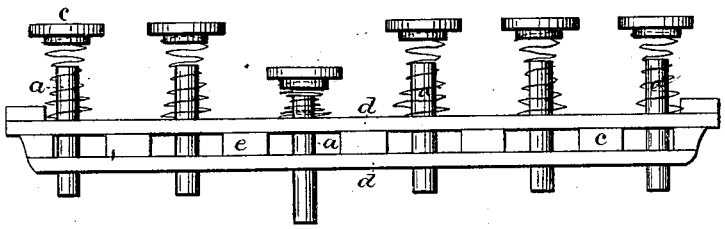
Bed Bottom.

No. 51,981. Patented Jan. 9, 1866.

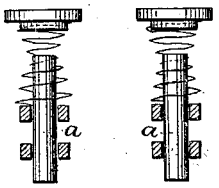
Fig; 3.



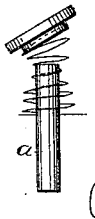
Fig; 4.



Fig; 5.



Fig; 6.



Witnesses;

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by his Att'y

John E. Ea

UNITED STATES PATENT OFFICE.

JOEL E. TODD, OF MIDDLETOWN, CONNECTICUT.

BED-BOTTOM.

Specification forming part of Letters Patent No. **51,981**, dated January 9, 1866.

To all whom it may concern:

Be it known that I, JOEL E. TODD, of Middletown, in the county of Middlesex and State of Connecticut, have invented a new and useful Improvement in Spring Bed-Bottoms; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a top view, and Fig. 2 a cross-section; Fig. 3, a top view of a different modification of my invention; Fig. 4, a side view of the same; Fig. 5, a cross-section, and in Fig. 6 a detached view to illustrate one of the advantages of this modification.

In the common construction of spring bed-bottoms in which upholstering or wire springs are used, the springs are generally either secured so that their position cannot be changed, or, if made changeable by placing upon slats, the change is limited to changing the position of the slats and the springs thereto attached to some other part of the bottom, and the common upholstering-spring is liable to, and often does, tip over, so as to be almost useless.

My invention is designed for a more extensive change of the springs, as also to overcome the objection to the common spring; and it consists in forming the spring around a spindle in form much like the ordinary upholstering-spring, the center or smallest part of the spring fixed to the top of a spindle and the upper end of the spring fixed to a disk, which said disk is independent of the spindle within the spring, and each spindle supported in an upright position, and constructed and arranged so that the spindle, with the spring and disk, may be changed for the position of any other spring in the bottom.

To enable others to construct and use my improvement, I will proceed to fully describe the same, as illustrated in the accompanying drawings.

I make the spring of the form denoted in red in Figs. 4 and 5, nearly of the form of the ordinary upholstering-spring, set upon a spindle, *a*, the center or smallest diameter of the spring fixed to the top of the said spindle and the upper end of the spring secured to a disk, *c*, so as to hold the said disk (when free) at a little distance above the spindle.

d d are two slats, placed one above the other, with blocks *e* between, and all firmly secured together, as seen in Fig. 4. Through the said slats, and between the blocks, I make holes, into which I set the lower end of the spindles, the wire spring resting upon the upper slat, the said holes of such diameter that the spindles will play freely therein up and down, and may be moved therefrom or changed to any other position in the bed-bottom.

The several slats, with their respective sets of springs, may be united and combined to form a whole bottom, or they may be placed separately in the bedstead.

The mattress is placed upon the disks in the usual manner, and when, from use or other causes, one or more of the springs becomes set, or its elasticity otherwise impaired, it may readily be removed and changed for another spring from any part of the bed less used; or, if for any purpose it is desirable to move the springs, they may one or all be taken from the slats without the use of any mechanical implement.

By constructing the spindles, disks, and springs as described a direct pressure upon the disks will be the same as in ordinary springs; but when the pressure is upon one side the disks will yield thereto, as seen in Fig. 6.

Having, therefore, thus fully described my improvement, what I claim as new and useful, and desire to secure by Letters Patent, is—

The combination of the spring with the spindle *a* and disk *c* when the said disk is separate from said spindle, substantially as and for the purpose specified.

JOEL E. TODD.

Witnesses:

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JOHN E. EARLE.