

J. TURNER.
 SPRING BED-BOTTOMS.

No. 180,392.

Patented July 25, 1876.

Fig. 1.

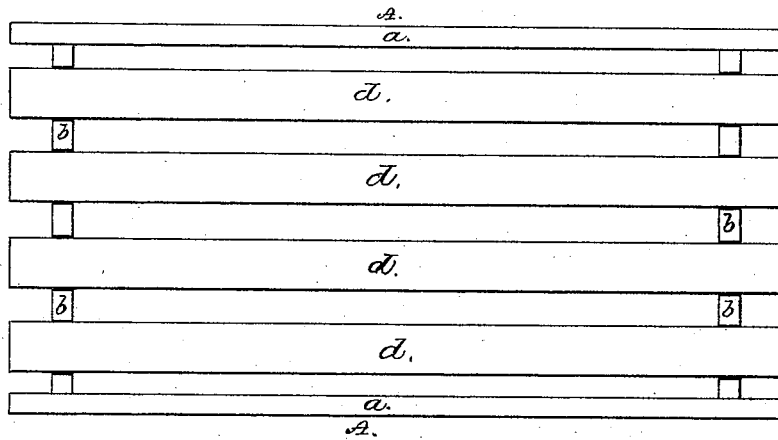


Fig. 2.

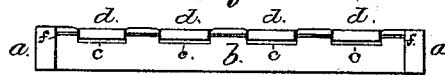
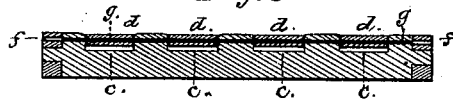


Fig. 3.



Witnesses.

Geo Gray
J. L. Hale

Joshua Turner.

by his attorney
J. P. Hale

UNITED STATES PATENT OFFICE,

JOSHUA TURNER, OF CAMBRIDGEPORT, MASSACHUSETTS, ASSIGNOR TO
BENJAMIN A. PETTINGILL AND ISAAC S. PEAR, OF SAME PLACE.

IMPROVEMENT IN SPRING BED-BOTTOMS.

Specification forming part of Letters Patent No. **180,392**, dated July 25, 1876; application filed
June 23, 1876.

To all whom it may concern:

Be it known that I, JOSHUA TURNER, of Cambridgeport, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Spring Bed-Bottoms; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

In such drawing, Figure 1 denotes a top view, and Fig. 2 an end elevation, of a spring-bed foundation constructed in accordance with my invention. Fig. 3 is a vertical and transverse section taken through one of the slat-suspending rods, to be hereinafter described.

The object of my invention is to produce a simple and cheap, as well as a durable and effective, spring foundation for a bed; and my invention consists in the peculiar construction, combination, and arrangement of parts, as hereinafter described and claimed.

In the said drawing, A denotes a rectangular frame, consisting of the side bars *a a* and the end bars *b b*, the said bars being composed of wood or other suitable material, and jointed together in the usual manner. Each of the end bars *b* has formed on its top surface a series of transverse slots or "gains," *c c*, &c., the same being formed of a width equal to or a little greater than that of the slats *d d*, &c., and of depth somewhat greater than the thickness of the slats—the latter being made of thin flexible wood.

Within each outer vertical face of the end bars *b*, and extending longitudinally thereof, I form a channel or groove, *f*, having a depth of about one-half an inch. Through each of these channels, longitudinally and near the center thereof, a rod, *g*, passes, such rod having a length corresponding with the length of the channel in the end bars, and extending through holes formed horizontally through the series of slats, the rods so arranged and supported serving to hold the series of slats suspended near each of their ends, the open channels or grooves permitting the rods to vibrate

or move laterally, to allow the desired flexibility or yielding of the slats while under pressure, the depth of the grooves being such as to arrest the movements of the slats when they have reached the desired degree of flexure.

It will be evident that the bars *g* might be made in sections, so each slat might be suspended and vibrate independently; but I prefer the method shown in the drawing.

In applying the slats to the frame in my improved manner, the rods *g g* are first inserted in holes in one of the side bars. The slats having been laid in the slots in the top of the bars, each rod is to be forced along its channel *f* in the end bar, and through holes formed widthwise through the slats, the rods being supported in the channel in the end bars, and not extending into the side bars, the whole being so arranged as to bring the top of the slats on the same horizontal plane with the top surface of the frame, the rods being so disposed as not to come into contact with a mattress or bed when laid on the frame. Thus it will be seen that all of the slats are suspended at or near their ends upon the two rods *g g*, and the latter are disposed within the channels, which allow the slats to have the requisite degree of flexible movement, and that provision is made for arresting the slats when the proper degree of flexibility is reached.

By my arrangement, should the slats become sprung or sagged by use, by simply withdrawing the rods *g g* the slats may be readily removed and reversed, and the rods again passed through the same, whereby the parts will become again firmly connected.

Having described my invention, what I claim is—

1. The improved spring bed-bottom, as described, the same consisting of the bars *a a* and *b b*, (the bars *b* being formed with the gains *c* and channels *f*), the slats *d d*, &c., and rods *g g*, the whole being constructed, combined, and arranged in manner as shown and described.

2. In a spring bed-bottom, the mode of suspending the ends of the slats—viz., upon the rods *g g*, extending through channels in the

cross-bars of the frame, as shown and described.

3. The combination of a series of slats suspended over gains, or their equivalents, by means of wires or rods passing through each of the slats near their ends, substantially as set forth.

In testimony that I claim the foregoing as my own invention I affix my signature in presence of two witnesses.

JOSHUA TURNER.

Witnesses:

F. P. HALE,
F. C. HALE.