

J. MENZIES.
SPRING BED-BOTTOM.

No. 183,956.

Patented Oct. 31, 1876.

Fig. 1.

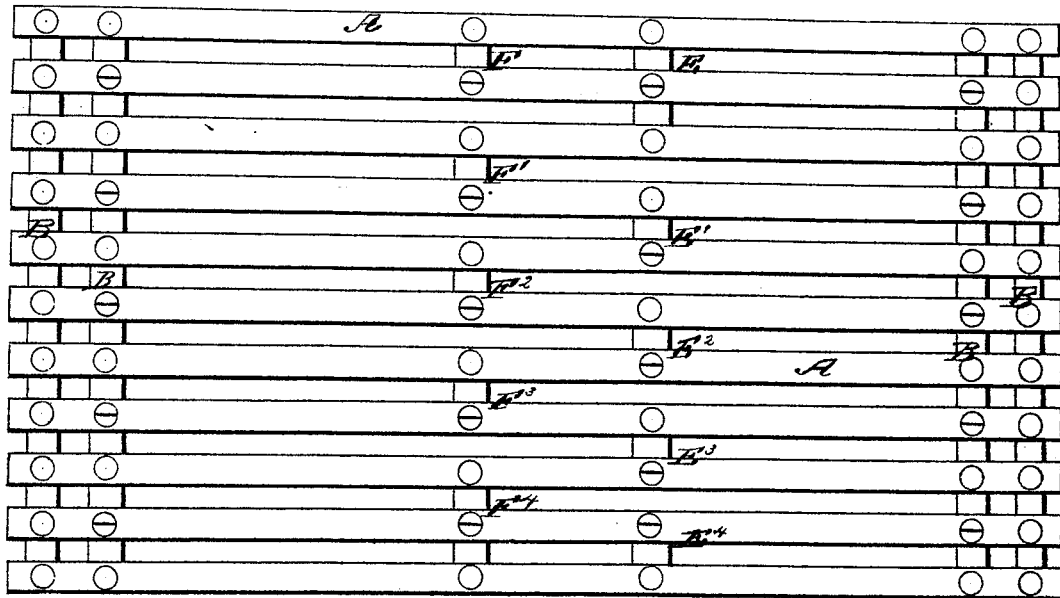
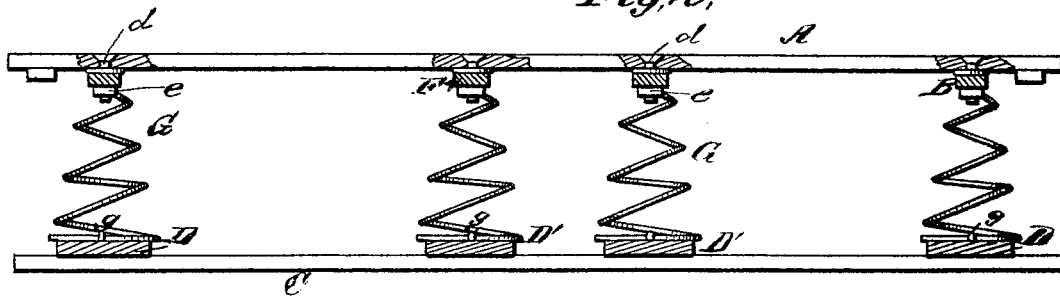


Fig. 2.



WITNESSES
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JOHN MENZIES, OF DETROIT, MICHIGAN.

IMPROVEMENT IN SPRING BED-BOTTOMS.

Specification forming part of Letters Patent No. **183,956**, dated October 31, 1876; application filed August 19, 1876.

To all whom it may concern:

Be it known that I, JOHN MENZIES, of Detroit, in the county of Wayne and State of Michigan, have invented a new and valuable Improvement in Spring Bed-Bottoms; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a plan view of my spring bed-bottom, and Fig. 2 is a longitudinal vertical sectional view thereof.

This invention relates to spring bed-bottoms; and it consists in the devices hereinafter particularly set forth and claimed.

In the annexed drawings, A A designate the longitudinal slats of the bed-bottom proper, and B B the cross-slats at the head and foot, which connect and strengthen said longitudinal slats. There are two of these cross-slats B at each end of the said bed-bottom. C designate the longitudinal bars of a lower and stronger frame, which has at its ends cross-bars D D, and across its middle part bars D' D'. The connection between said lower frame and the upper frame or bed-bottom proper is made by means of a quadruple series of spiral supporting-springs, G G. The connection of said springs with the said lower frame is made by means of staples *g*, which are formed by driving the points of a bent rod down through cross-bar D or D', as the case may be, and then turning up said ends to make the said staple hold. The connection of said springs with the upper frame or bed-bottom proper is made by means of bolts *d* and nuts *e*. The upper end of the spring is in each case slipped in between one of the cross-slats and one of the longitudinal slats of said bed-bottom, and then the nut *e* is screwed home on the screw-threaded bolt *d*, which passes through said cross-slat and said longitudinal slat, and said slats are thus bound tightly together, clamping the upper end of said spiral spring between them. Across the

bottom of the bed-bottom proper are arranged a double series of slat-sections, E E¹ E² E³ E⁴ and F F¹ F² F³ F⁴, which are attached to longitudinal slats A A as follows: Beginning on the right cross-section E is secured to the first three of said longitudinal slats, and section F is secured to the first two of said slats. Cross-section F¹ is secured to the third and fourth of said slats A, and cross-section E¹ to the fourth and fifth of said slats. This alternating arrangement continues across the bed-bottom, though on the other side thereof F⁴ is secured to three longitudinal slats, and E⁴ to only two. The object of said arrangement is to allow a certain amount of vertical vibration to the center of said bed-bottom without affecting the sides thereof. The number of said cross-sections will differ, according to the number of longitudinal slats in the bed-bottom. Each cross-slat section is opposite to a vacant space in the other series, and all the longitudinal slats are connected, though irregularly, which serves to brace each one against fracture.

I am aware that the cross-slats of a bed-bottom supported by springs have heretofore been tied together by means of long and short connections; and I am also aware that band-supporters and cross-bands have heretofore been employed in connection with helical springs, support-bars, and slats; and I therefore lay no claim to such inventions.

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

The bed-bottom herein described, consisting of longitudinal slats A A, cross-slat sections E E¹ F F¹, and springs G, connected to the lower frame by staples, and to the upper frame by nuts and bolts, substantially as described, and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN MENZIES.

Witnesses:

J. F. HOBBS,
JNO. B. CORLISS.