N. T. HAMILTON.
Bed-Bottom.

No. 208,591. Patented Oct. 1, 1878.

Fig. 1.

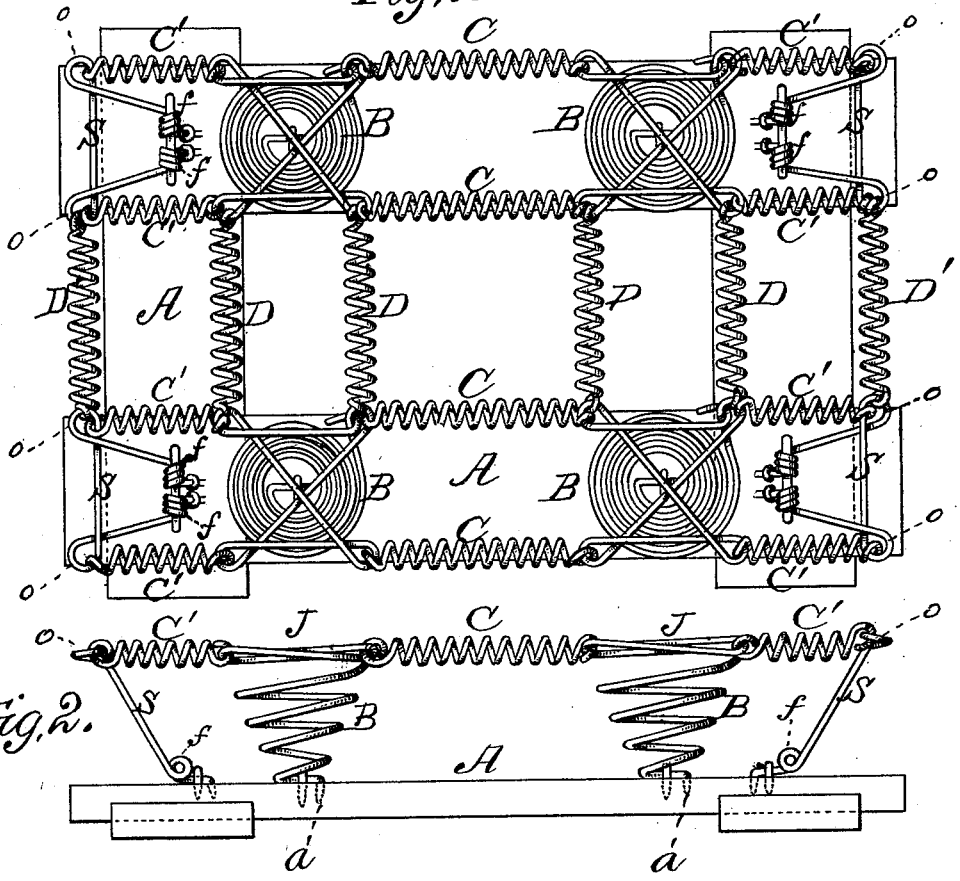
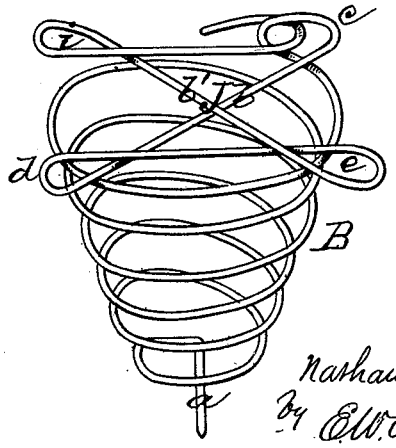


Fig. 2.

Fig. 3.



WITNESSES
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NATHAN T. HAMILTON, OF CEDAR FALLS, IOWA.

IMPROVEMENT IN BED-BOTTOMS.

Specification forming part of Letters Patent No. **208,591**, dated October 1, 1878; application filed September 7, 1878.

To all whom it may concern:

Be it known that I, NATHAN T. HAMILTON, of Cedar Falls, in the county of Black Hawk and State of Iowa, 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 drawings is a representation of a top view of my improved spring bed-bottom. Fig. 2 is a side view thereof, and Fig. 3 is a perspective view of a bed-spring.

The nature of the invention consists in the construction and novel arrangement of a spiral bed-spring having at its upper end a platform made by bending its upper portion into **X** shape and forming eyes at the extremities of the cross-bars, the spring and platform being constructed of a single piece of wire.

It also consists in the construction and novel arrangements of parts, as will be hereinafter shown and described.

In the annexed drawings, the letter A designates the bed-frame, designed to fit snugly between the side rails and head and foot boards of a stead. Upon this frame is secured the spring bed-bottom, composed essentially of the spiral springs B, the longitudinal connecting-springs C, and the transverse connecting-springs D. The springs B are spiral in form, the coils gradually enlarging from bottom to top, and have at their apexes each a tang or tongue, *a*, that, being inserted into a perforation in frame A, holds the said spring upright. The material of the spring—usually copper spring-wire—either before or after the said spring is coiled, is bent into a loop, *c*, then carried across the top whirl, and bent into a second loop, *d*. It is then carried at an acute angle to the first branch, *b*, across the said whirl, and again looped at *e*. It is then carried across the first branch aforesaid, as shown at *b'*, looped at *i*, and its extremity hooked or otherwise secured to the loop *c*, forming a bearing-platform, J, having the appearance of the letter **X**. The loops *c d e i* are preferably outside of or just over the last bend or whirl of spring B, and serve as points of attachment to the connecting-springs C D. These are simple coils, having at each end a hook, and uniting respectively the individual springs of each row with each other and with those of adjacent rows. These springs form with the bearing J a species of flexible frame, upon which the mattress is laid, and serve to hold the springs B upright in position to support the mattress.

The longitudinal connecting-springs C are kept properly tense by means of the end tension-springs S, that are of the general form of the letter **U**. The legs of these springs are provided with spring-coils *f* and are rigidly secured to the frame, and their angles each with a loop, *o*, by means of which they are connected by springs C' D' to the bed-springs B. When this bed-bottom is used the inclined end tension-springs take up any slack which may have occurred from the sinking thereof. They likewise hold its top level, causing the bed to present a smooth even surface when not in use.

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

1. The spiral bed-spring B, having at its upper end a platform made by bending its upper portion into **X** shape and forming eyes *c d e i* at the extremities of the cross-bars *b b'*, the spring and platform being constructed of a single piece of wire, substantially as set forth.

2. In a bed-bottom having the spiral bed-springs B, provided with the **X**-shaped platform *b b'* and eyes *c d e i* on its upper surface, the longitudinal and transverse connecting-springs D C, engaging the eyes of said springs B with the upper portion of the adjacent springs on the same row, and with those of the springs on the adjacent rows and with the springs S, substantially as specified.

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

NATHAN T. HAMILTON.

Witnesses:

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J. COWING.