(No Model.)

H. BLUMENSTEIN & J. WALDSMITH.

Spring Bed Bottom.

No. 243,355. **Patented June 28, 1881.**

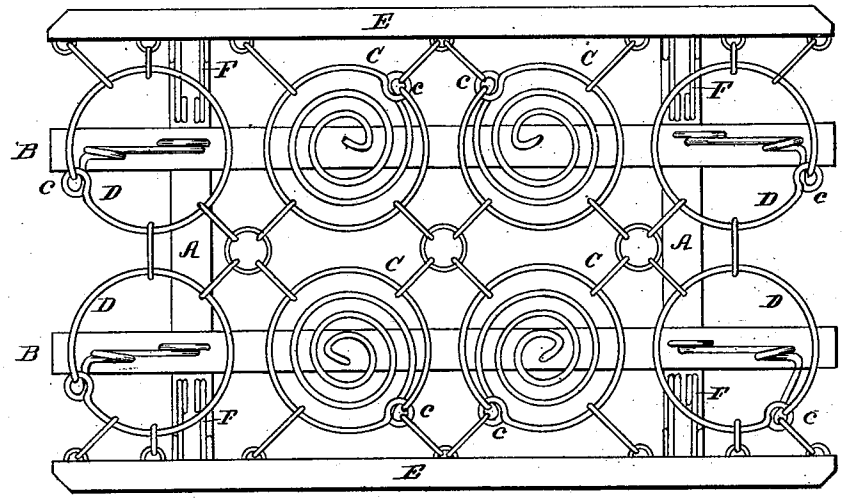


Fig. 1.

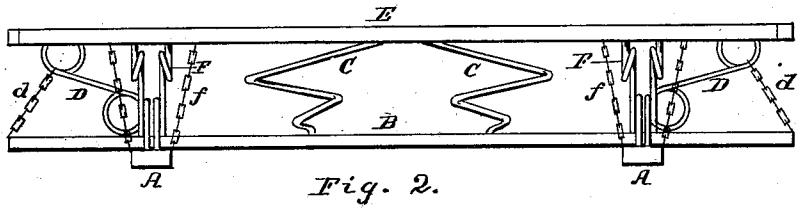


Fig. 2.

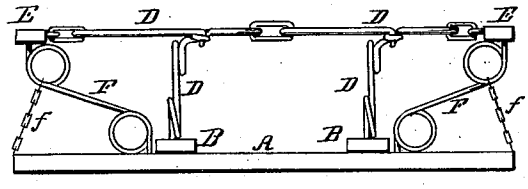


Fig. 3.

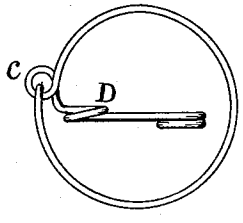


Fig. 4.

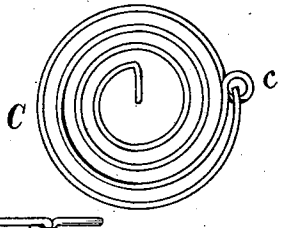


Fig. 5.

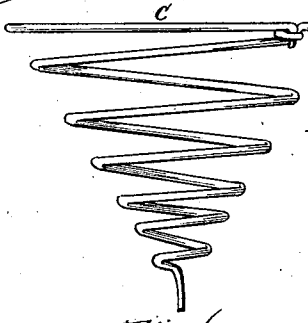


Fig. 6.

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UNITED STATES PATENT OFFICE.

HENRY BLUMENSTEIN AND JACOB WALDSMITH, OF AKRON, OHIO.

SPRING BED-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 243,355, dated June 28, 1881.

Application filed September 13, 1880. (No model.)

To all whom it may concern:

Be it known that we, HENRY BLUMENSTEIN and JACOB WALDSMITH, of Akron, in the county of Summit and State of Ohio, have invented a new and useful Improvement in Spring Bed-Bottoms, of which the following is a specification.

Our invention relates to that class of bed-bottoms which consist of conical spiral springs supported by a suitable frame-work, and having a slat upon each side of the upper surface.

The objects of our invention are to keep the bed in constant tension in each direction, to prevent slipping of the loop of each spring, and to facilitate the removal and replacing of springs at will. We accomplish these objects by means of the devices exhibited in the accompanying drawings, wherein—

Figure 1 is a plan of a bed-bottom embodying our invention; Figs. 2 and 3, side and end elevations of the same, respectively; Fig. 4, a plan of one of the end springs; and Figs. 5 and 6, a plan and side elevation, respectively, of the central springs.

A suitable frame-work, A A B B, forms the foundation of the bed-bottom. Upon this are placed the central or body springs, C C, each constructed as shown in Figs. 5 and 6, the upper loop serving to form a surface upon which the mattress rests. To prevent the upper loop from slipping when any strain is applied to the surface the end of each spring is hooked through a loop, *e*, turned in the second coil, by which arrangement the upper loop forms a fixed ring. The lower end of each spring projects downward in a straight pin, as shown in Fig. 6, and enters a corresponding hole in the frame B B. By this arrangement each spring may be readily removed and replaced, when desired, for cleaning or otherwise.

At either end of each row of body-springs are end springs, D D. These springs consist of a loop similar to the top loop of the springs C, and thence the wire is turned downward in a double-looped S-shaped spring, as shown, and is attached to the frame B B.

This device permits free depression of the bed, while it also maintains constant longitudinal tension of the surface.

At either side of the bed are slats E E. These slats rest upon and are supported by double-turned S-shaped springs F F, attached to the frame A A. These springs serve to preserve lateral tension of the bed, operating in the same manner as the springs D D. Suitable staples, loops, and rings serve to connect the slats E E and springs C D, and constitute therewith a surface whereon the mattress rests. Short chains *f f d d* prevent the springs F D from turning too far inward.

We claim as our invention—

1. The end springs, D D, consisting of the upper ring and double-turned S-shaped spring, substantially as shown, for the purpose specified.

2. The combination, with the rows of body-springs and the frame-bars B, of the end springs, D, consisting of the upper rings and double-turned S-shaped springs, connected and operating substantially as described.

3. The combination, with the body-springs, supporting-bars, and end springs, D, of the chains *d*, substantially as and for the purpose set forth.

4. The herein-described bed-bottom, consisting of the supporting frame-bars, inverted conical body-springs C, connected together by links, the end springs, D, consisting of the top rings and downward-extending S-shaped springs, the side bars, E, and double-turned springs F, substantially as described.

In testimony that we claim the foregoing we have hereunto set our hands this 5th day of June, A. D. 1880.

HENRY BLUMENSTEIN.
JACOB WALDSMITH.

Witnesses:
F. C. BRYAN,
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