

W. H. AUSTIN.
Spring Bed-Bottoms.

No. 154,210.

Patented Aug. 18, 1874.

Fig 1.

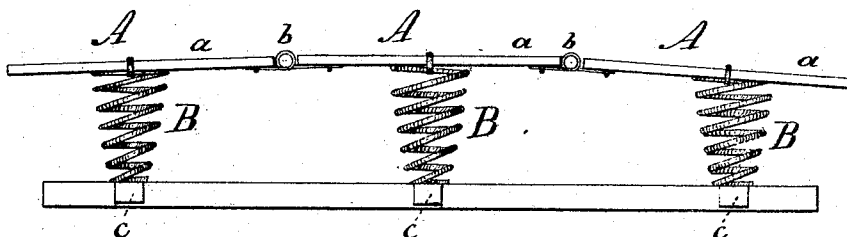


Fig 2.

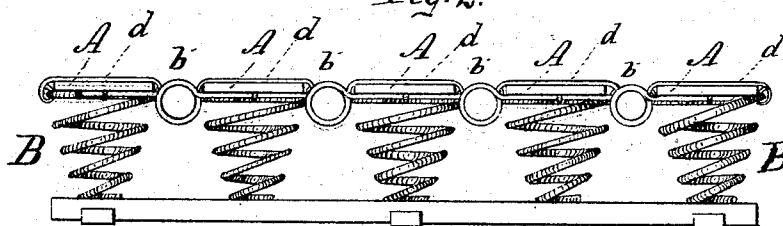


Fig 3.

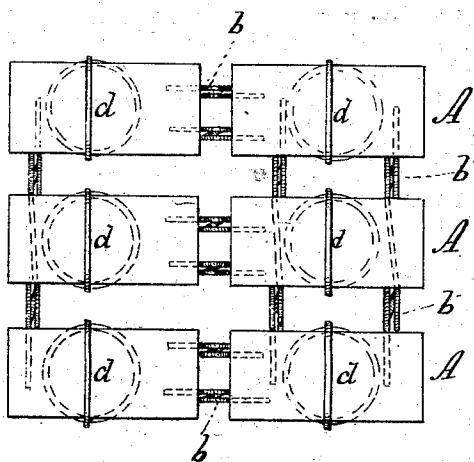
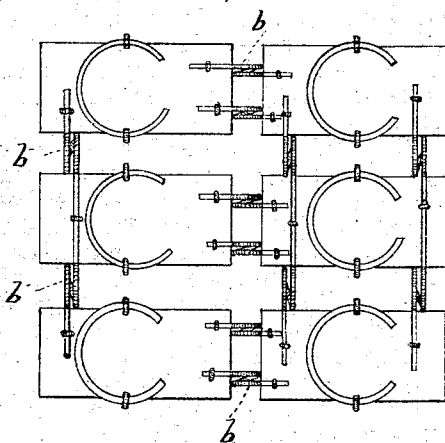


Fig 4.



WITNESSES-
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UNITED STATES PATENT OFFICE.

WILLIAM H. AUSTIN, OF WEST WINFIELD, NEW YORK.

IMPROVEMENT IN SPRING BED-BOTTOMS.

Specification forming part of Letters Patent No. **154,210**, dated August 18, 1874; application filed May 25, 1874.

To all whom it may concern:

Be it known that I, WILLIAM H. AUSTIN, of West Winfield, in the county of Herkimer and State of New York, 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 drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention consists in a combination of slats and springs in such a manner as to produce a spring bed-bottom which is elastic and billowy in all directions. Spring bed-bottoms have heretofore been constructed of sectional slats, in which the sections are joined end to end by springs, and of continuous slats joined side to side by springs, and of plates joined to adjacent plates on four sides by flexible connecting-links, said plates resting upon helical springs. To each of these kinds of bed-bottoms there are objections. For instance, in the first-named, the slats, not being connected side to side, are liable to spread apart, and so render inefficient support to the mattress in some portions, making an uneven bed; and, besides, the slats, not being connected by springs, render no assistance to each other in resuming position after depression. In the second-named kind there is no longitudinal elasticity whatever. In the third, the plates are not connected at all by springs or elastic links, and so when any portion of the bed is depressed it more or less affects every other portion, causing an inclination from the limits of the bed toward the depressed portion; and, further, as for lack of elastic connections the plates depend upon the helical springs upon which they rest for restoration to position after depression, the bed is soon rendered uneven on account of the impracticability of the said helical springs being made of such uniform tension and quality of material as to preserve a uniform height. My invention obviates these objections, as will be explained herein.

Figure 1 is a side elevation of my improved

spring bed-bottom. Fig. 2 is an end elevation. Fig. 3 is a plan view embracing six slat-sections. Fig. 4 is a view of the under side of six slat-sections.

A designates the slats of which the top of my spring bed-bottom is composed, each slat consisting of three sections, *a a a*. These sections are connected, end to end and side to side, by spiral springs, the straight projecting ends of which are fastened to the under sides of the slat-sections, as shown in Fig. 4, the coiled portions lying between the edges of the sections at the ends and sides thereof, and parallel with said edges, thus forming a spring-hinge. With this form of interposed spring the slats may be separated only by a space equal in width to the diameter of the coils, which may be increased in length to any desired extent, according to the degree of flexibility required in the bed. The spiral springs connecting the sections are designated by *b b* at the ends of slat-sections, and *b' b'* at the sides. Each of the sections *a* rests upon a conical spring, *B*, inverted, so that the apex rests upon the base-beam *c*, while the slat-section lies upon the base or wide end of the spring. Across the middle of each slat-section is a clamp, *d*, consisting of a rod having its ends bent downward over the edges of the sections, and formed into hooks for holding the adjacent coils of the supporting-springs, as shown in Fig. 4.

I claim and desire to secure by Letters Patent—

The spring bed-bottom, substantially as described, having the slat-sections *a a a* connected together, both at their ends and sides, by means of spiral springs *b b b' b'*, the coils of which are parallel with the edges of the slats, and the whole supported by springs arranged under the center of each slat-section, as and for the purpose specified.

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

WILLIAM H. AUSTIN.

Witnesses:

PETER HASLEHURST,
MYRON ELDRED.