

G. W. HARDY.

Improvement in Spring Bed-Bottoms.

No. 131,165.

Patented Sep. 10, 1872.

Fig. 1.

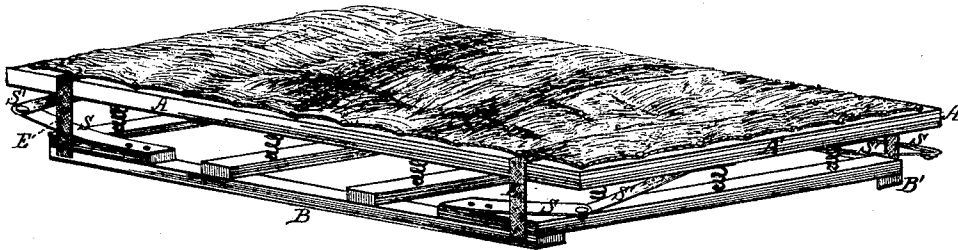


Fig. 2.

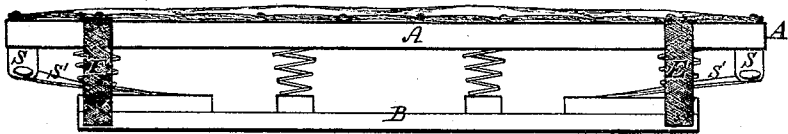
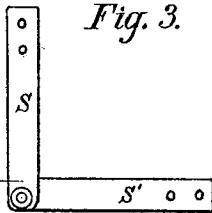


Fig. 3.



Witnesses:

Jno. D. Patten

Alonzo Hughes

Inventor:

George W. Hardy

By *Johnson, Alauete & Co.*
Associate Attorneys

UNITED STATES PATENT OFFICE.

GEORGE W. HARDY, OF GRAND RAPIDS, MICHIGAN.

IMPROVEMENT IN SPRING BED-BOTTOMS.

Specification forming part of Letters Patent No. **131,165**, dated September 10, 1872.

Know all men by these presents:

That I, GEORGE W. HARDY, of the city of Grand Rapids, county of Kent and State of Michigan, have invented certain new and useful Improvements in Spring Bed-Bottoms, of which the following is a specification:

My invention relates to a metallic spring-brace used in combination with the upper and lower frames of an ordinary coiled-spring bed-bottom, for the purpose of holding the upper and lower frames firmly in their proper relative position, and for the further purpose of giving greater elasticity to the bed-bottom.

In the accompanying drawing, Figure 1 shows a perspective view of a bed-bottom to which my invention is applied. Fig. 2 is a side view of the same; and Fig. 3, one of the spring-braces.

In Fig. 1, B B' are side pieces of the lower part of the bed-bottom; A A, the upper frame of the bed-bottom. S S' are metallic springs constructed out of metal formed into thin strips and riveted together at right angles, in the form of an ordinary carpenter's square, substantially as shown in Fig. 3. In a bed-bottom to which my invention is applied the lower frame is made smaller than the upper frame of the bottom, and the spring-brace is attached to the lower surface of the end frame of the upper part of the bed-bottom and to the upper surface of the side piece of the lower frame of

the bed-bottom, the attachment being effected by screws, nails, rivets, or in any other suitable manner. The attachment of the spring-brace is shown in Figs. 1 and 2 of the drawing. I use four of these spring-braces in each bed-bottom, one at each corner, the spring-braces being placed bracing, as shown in the drawing. As the upper and lower frames of the bed-bottom are pressed together the elbow or angle of the brace is forced outwardly, giving a twisting pressure to the metallic pieces composing the brace, thereby increasing its elasticity. A piece of ordinary webbing may be used to prevent the upper and lower frames of the bed-bottom from being forced too far apart by the springs or spring-brace, as shown in Figs. 1 and 2, by E.

I make no claim upon the frame-work or webbing; but

What I do claim to have invented, and desire to secure by Letters Patent, is—

The right-angled metallic spring-brace S S', in combination with the upper frame A and lower frame B B', when constructed and arranged substantially as and for the purposes herein set forth.

GEORGE W. HARDY.

Witnesses:

HIRAM A. FLETCHER,
EDWARD TAGGART.