E. J. JOHNSON & M. E. MILLS.

Spring Bed-Bottom.

No. 206,735. Patented Aug. 6, 1878.

Fig. 1.

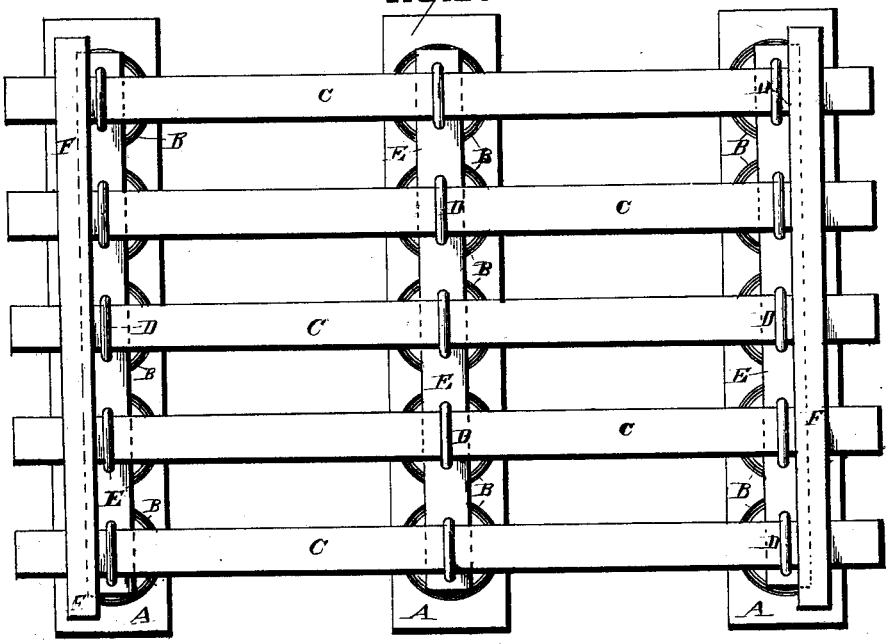


Fig. 2.

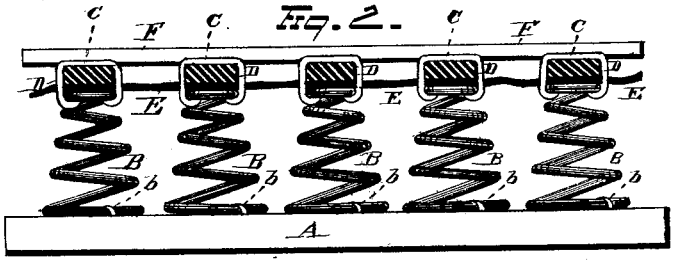


Fig. 3.

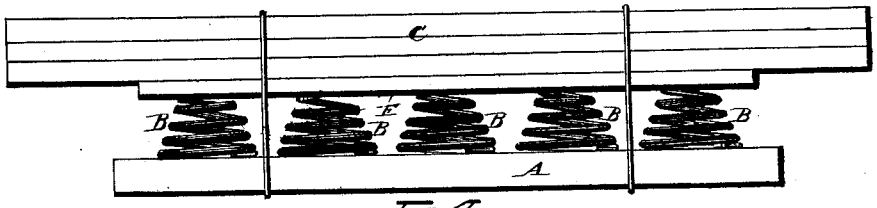
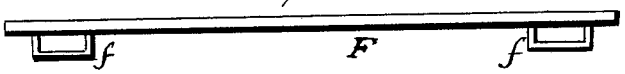


Fig. 4.



WITNESSES:
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UNITED STATES PATENT OFFICE.

EDWARD J. JOHNSON AND MORTON E. MILLS, OF TWINSBURG, OHIO.

IMPROVEMENT IN SPRING BED-BOTTOMS.

Specification forming part of Letters Patent No. **206,735**, dated August 6, 1878; application filed June 3, 1878.

To all whom it may concern:

Be it known that we, EDWARD J. JOHNSON and MORTON E. MILLS, of Twinsburg, in the county of Summit and State of Ohio, have invented certain new and useful Improvements in Spring Bed-Bottoms; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

Our invention relates to an improvement in spring bed-bottoms; and consists in the parts and combination of parts hereinafter described and claimed.

In the drawings, Figure 1 is a plan view of a device embodying my invention; Fig. 2, a sectional view, showing the strip or cushion, brace, loop, and accompanying parts. Fig. 3 is a view showing the parts folded and ready for shipment. Fig. 4 is a detail view of the cross-brace, showing the metal loops by which it is connected with the opposite side slats.

A A are the bars, upon which rest the spiral springs B, which support the slats C. The springs B are firmly secured to the bars A by the staple *b*, and the slats are secured or held to the springs by the metallic loops D, which pass around the slats, through the leather E, to the top coil of the spring, around which the ends of the loops are bent and fastened.

Between the slats and springs is placed a cushioning of leather, rubber, webbing, or equivalent material. This we consider an important feature of our invention, for, where there is no cushion between the spring and slat, when pressure is had upon the slats it causes them to come directly in contact with the springs, thereby creating an unpleasant screaky noise. By intervening between the two a cushion, as above described, when weight comes upon the slats and springs no noise whatever will be heard.

F are wooden braces, at the ends of which are metallic loops *f*, large enough to encircle one of the slats. These braces are placed crosswise of the slats at their ends, and are held in position by the metallic loop *f* being placed around the end slats.

The braces F accomplish a twofold purpose. The first and most important one is that they hold the slats securely in their position, and will not permit of a lateral or sidewise movement of the springs B, and will give and increased height to the end of the bedding which supports the pillow.

It is obvious that the bars A may constitute a part of the bed-frame and be placed in the frame as cross bars or slats are usually put in, or they may be supported upon the cross-bars of the ordinary bed-frame, the object being to so arrange the springs in connection with the brace and cushioning that the position of the bed-bottom shall be always uniform, regardless of the pressure upon it, and shall be noiseless.

It is apparent that a metallic brace would answer equally as well as the wooden brace here shown, and we may use an additional brace to cover the middle tier of springs.

We would also have it understood that for the metallic loops here shown we may substitute cord or the like.

An important desideratum attained in the construction here shown is that the parts may be easily and readily separated by withdrawing the brace and pulling the slats through the loops, thereby separating all the parts and rendering them capable of being closely packed when necessary to ship them.

What we claim is—

1. The combination, with the springs B and slats C, of the loops D and cushions E, substantially as and for the purpose described.

2. The combination, with the springs B and slats C, of the loops D, cushions E, and braces F, substantially as and for the purpose described.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

EDWARD J. JOHNSON.
MORTON E. MILLS.

Witnesses:
F. TOUMEY,
W. E. DONNELLY.