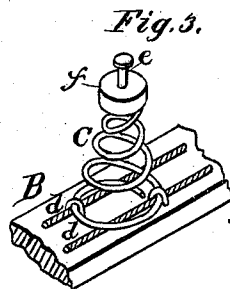
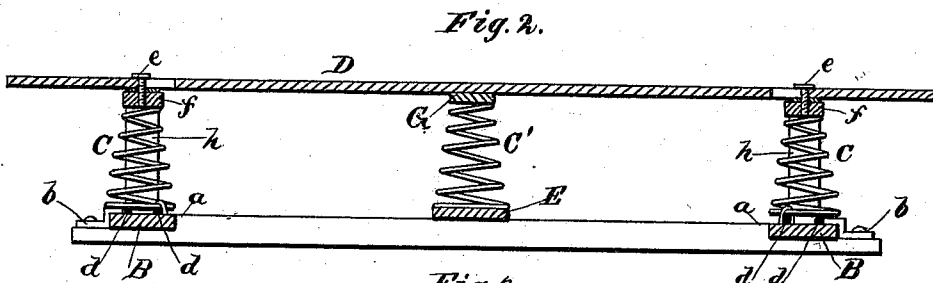
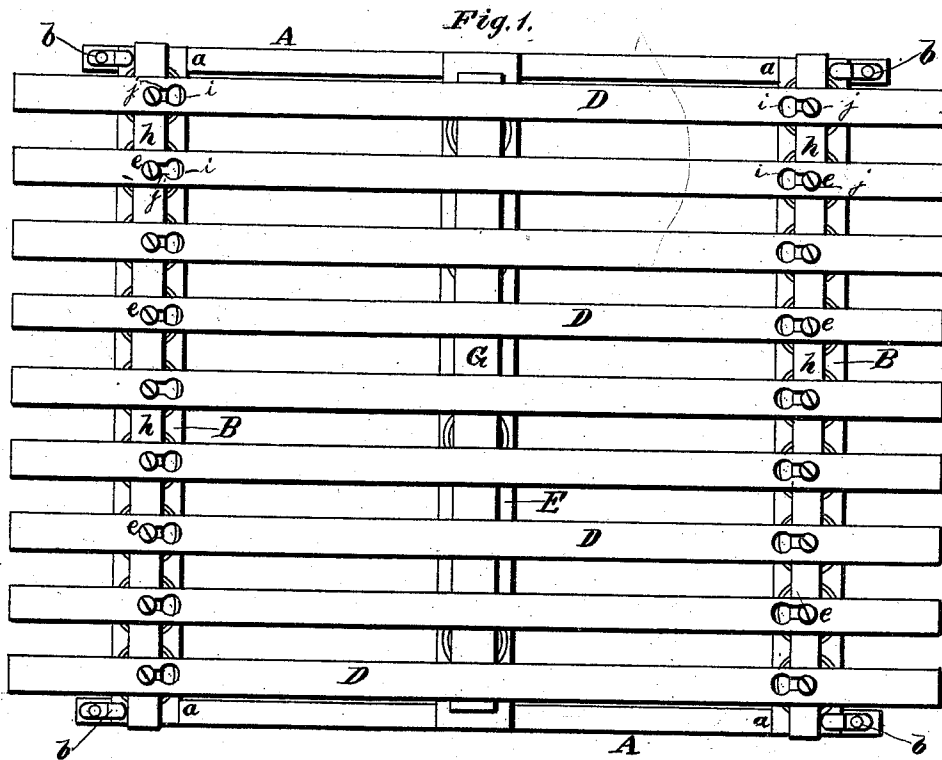


R. M. HALL.
 SPRING BED-BOTTOM.

No. 176,857.

Patented May 2, 1876.



Witnesses:
 W. H. Duhamel
 Thomas Byrne.

Inventor.
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UNITED STATES PATENT OFFICE.

ROBERT M. HALL, OF WESTFIELD, NEW YORK.

IMPROVEMENT IN SPRING BED-BOTTOMS.

Specification forming part of Letters Patent No. **176,857**, dated May 2, 1876; application filed December 11, 1875.

To all whom it may concern:

Be it known that I, ROBERT M. HALL, of Westfield, county of Chautauqua and State of New York, have invented certain new and useful Improvements in Bed-Bottoms, of which the following is a specification:

The nature of my invention consists in the construction and arrangement of a spring bed-bottom, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, which forms a part of this specification, and in which—

Figure 1 is a plan view of my improved bed-bottom. Fig. 2 is a longitudinal vertical section of the same. Fig. 3 is a view of one of the springs, with blocks attached thereto.

A A represent the side rails, which are cut out at each end on the upper side to form shoulders *a*. Against these shoulders at each end is placed a cross-bar, B, held in place by means of buttons *b*. The connecting-rails A A can, by this mode of fastening, be adjusted without the aid of tools. On each cross-bar B are secured a series of spiral springs, C, by means of staples or other suitable fastenings. Between the springs C and cross-bar B are introduced cords *d* upon which the springs rest, thus preventing any noise at this point. To the upper end of each spring C is fastened a wooden block or cap, *f*, of any suitable shape, and on top of said caps across the entire series of springs is placed a strap, *h*, of leather, webbing, or other suitable material, the ends of which are fastened to the ends of the cross-bar B. Through the strap *h* into

each cap *f* is fastened a screw or bolt, *e*. The straps *h* that hold the springs C are of a flexible material. The slats D are held on the springs C by the headed screw or bolt *e*. The upper part of spring is pressed forward until the bolt *e* will enter the aperture in the slat D at *i*. After the head of the bolt passes the top of the slat the spring resumes its perpendicular position, forcing the bolt *i* to the back part of the aperture at *j*, thereby securely locking the slat D in place. The straps *h* keep the springs in position and separate the slats from the caps, thereby preventing any squeaking, and by the mode of fastening the slats each slat has an independent movement.

When this bed-bottom is used for heavy persons an additional series of springs, C', attached to a bottom board, E, and top slat, G, are placed under the bed-slats D D. The spring-board E rests upon the rails A A, and is movable upon the same, so that these springs may be placed at any point required.

The springs herein described, with their mode of fastening, may be used also in cot-bedsteads.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination of the springs C with caps *f*, strap *h*, screws or bolts *e*, and perforated slats D, as and for the purposes herein set forth.

In testimony that I claim the foregoing as my invention I hereunto affix my signature.

ROBERT M. HALL.

Witnesses:

THOMAS M. KNIGHT,
ROSS KNIGHT.