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G. LIGHTFOOT.

Improvement in Spring Bed Bottoms.

No. 122,325. Patented Jan. 2, 1872.

Fig. 1.

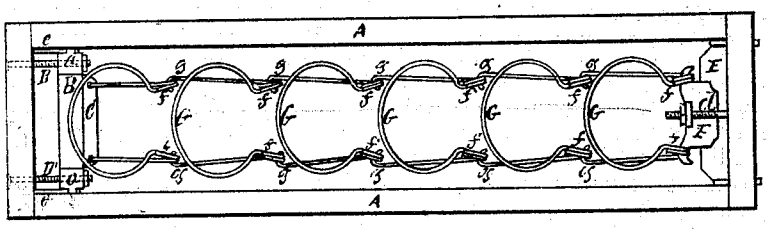
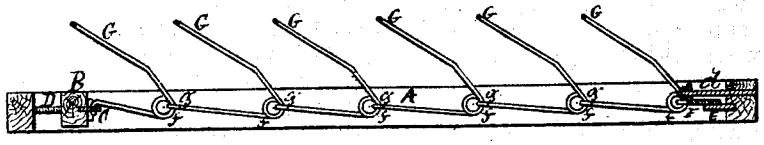


Fig. 2.



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UNITED STATES PATENT OFFICE.

GOODRICH LIGHTFOOT, OF ELGIN, ILLINOIS.

IMPROVEMENT IN SPRING BED-BOTTOMS.

Specification forming part of Letters Patent No. 122,325, dated January 2, 1872.

To all whom it may concern:

Be it known that I, GOODRICH LIGHTFOOT, of Elgin, in the county of Kane and State of Illinois, have invented certain new and useful Improvements in Spring Bed-Bottoms; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a top view of a portion of a spring bed-bottom embodying my improvement, and Fig. 2 is a vertical longitudinal section of the same, cutting the springs through the center.

Similar letters of reference indicate like parts in both figures of the drawing.

The nature of my invention consists: First, in the shape and manner of connecting the springs, whereby each separate spring shall form the connecting link for the adjacent spring, which will be more fully understood by the following description; second, in providing the frame supporting the springs with a cross-head, to which the springs are attached, the said cross-head being so arranged as to admit of the movement in the direction of the length of the frame, whereby the several sections of springs are uniformly adjusted; and third, in the device for adjusting the separate sections of springs, whereby the proper tension is obtained.

In the drawing, A represents the frame, the size of which is made to closely fit the inner side of the frame of the bedstead to which it is attached, and is secured therein by resting upon proper supports firmly affixed to the inner side of the rail. B is the cross-head, which extends across from side to side of the frame A, and is provided at each end with ferrules *a a'*, within which the said cross-head is closely fitted. These ferrules are provided within their outer ends with grooves or channels, which receive and move upon guides or ways *e e'* secured to the inner sides of the frame. C is a metal slat or rail, which is grooved into the said cross-head, and is secured therein by passing into the said ferrules, the ends thereof being shaped to admit of the same. D and D' are screw-threaded bolts, which pass through the cross-head and end rail of the frame, as shown by dotted lines, Fig. 1. These bolts are so arranged as to hold the said cross-head at any desired adjusted point upon the guides or ways *e e'*. E is a metal slat, which is firmly secured to the inner side of the end rail of the frame and extends its entire length. This slat extends or projects inward toward the center of the frame, forming a support, upon which is loosely fitted a stirrup, F. Affixed to or passing through this stirrup is a screw-threaded bolt, *d*, which extends outward through the end rail of the frame A, by which the said stirrup is moved toward or from the center of the frame, and firmly secured at any desired point of adjustment upon the slat. G are the springs, which are made of metal wire of suitable size to secure the proper degree of elasticity. These springs are made of one and the same piece, bent in the form shown in the drawing, Fig. 1, and are provided at their rear ends with two separate annular coils, *f f*, and at the forward end of the lower portion with hooks *g g*, which take into the coil of the adjacent spring, by which the separate springs are united, thereby forming a continuous strap, extending from end to end of the frame. The outer coils of the said strap are secured to the stirrup F, and the hooks at the opposite end take into apertures formed in slat C, by which the said strap is secured in proper position within the frame.

In constructing my bed-bottom I arrange any desired number of straps parallel, one with the other, within the frame, thereby securing the proper width.

To secure the proper tension of the separate straps I move stirrup F outward by means of bolt *d*, thereby securing a uniform length of the respective straps; and when desired to increase the tension of the straps jointly I move cross-head B outward by means of the bolts D D', thereby insuring the proper degree of elasticity of the springs.

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

1. The springs G, provided with the annular coils *f* and *f*, when made of one and the same piece, in combination with the stirrup F, bolt *d*, and slat E, arranged substantially as and for the purpose set forth.

2. The combination of cross-head B, bolts D D′, strap C, ferrules *a a′*, and guides or ways *e e′*, all arranged substantially in the manner and for the purpose specified.

In testimony whereof I have hereunto signed my name before two subscribing witnesses.

GOODRICH LIGHTFOOT.

Witnesses:

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