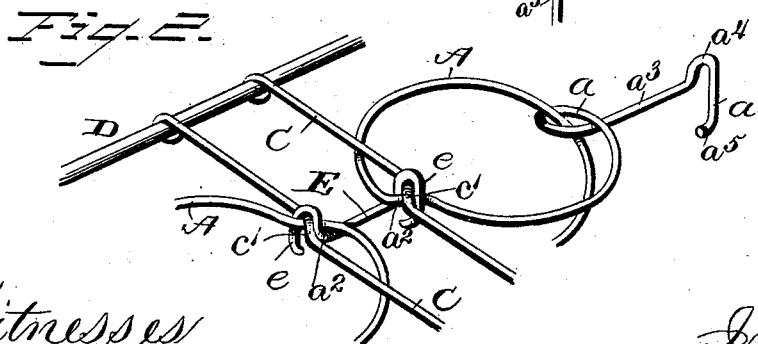
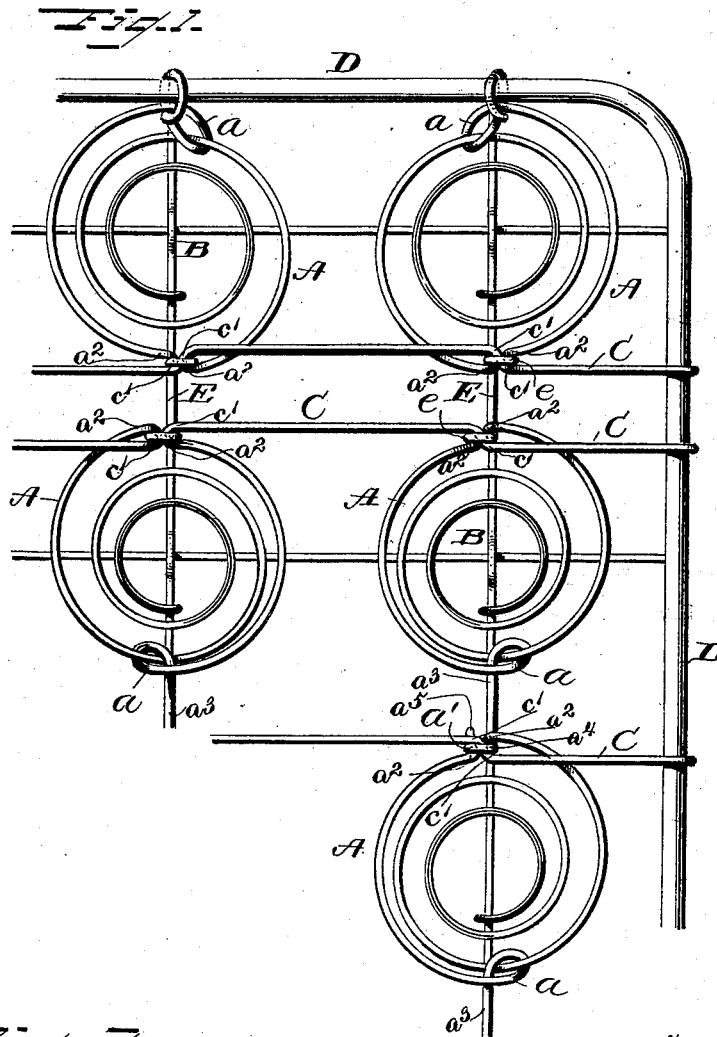


(No Model.)

J. P. LEGGETT.  
SPRING BED BOTTOM.

No. 553,412.

Patented Jan. 21, 1896.



Witnesses  
G. Williamson,  
J. G. Boswell,

Inventor  
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Attorney.

# UNITED STATES PATENT OFFICE.

JOSEPH P. LEGGETT, OF CARTHAGE, MISSOURI.

## SPRING BED-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 553,412, dated January 21, 1896.

Application filed August 17, 1893. Serial No. 483,399. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH P. LEGGETT, a citizen of the United States, residing at Carthage, in the county of Jasper and State of Missouri, 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 of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

The present invention relates to spring-beds, and aims to provide a bed of the class employing volute spiral springs, which, while being amply yielding and comfortable, shall have the springs securely held from movement out of their proper places, and this by means both simple and easily employed.

To this end said invention consists in the spring-bed having the construction hereinafter described, and illustrated in the drawings, in which—

Figure 1 is a plan view of a portion of a bed made in accordance with my invention; Fig. 2, a detail perspective view.

In the drawings, A designates the volute springs whose lower ends are attached to intersecting wires or bars B B, as shown in my Patent No. 434,794, or to any other suitable support, my present invention having nothing to do with this portion of the bed.

The upper coil of each spring A is formed with a lateral bend on one side of the spring, providing an offset  $a^2$ , and the free end is carried in a loop  $a$  at the other side of the spring over, under and over the adjacent inner coil, and then the free end passes under itself in a straight arm  $a^3$  under the top coil of the adjacent spring, to the offset of which and to the superposed offset  $c'$  of a stay-rod C it is fastened by an upward bend  $a^4$  crossing and embracing the offsets between the coil and stay-rod. The bend  $a^4$  is formed with a pendent extension  $a'$  having a hooked extremity  $a^5$  located beneath the stay-rod.

It will be observed that the stay-rod passes above the top coil of the spring and not under the same, thus avoiding the interlacing that the latter would necessitate and the consequent troublesome bending of the rod or spring or both, in order to firmly secure these two together. With my construction the rod

is bent only the trifling amount needed for the passage of the bend  $a'$ , and yet the parts are rigidly held by the latter.

There is a stay-rod for each line of springs, and said rods run in parallel lines from one side of the frame D to the other and lengthwise thereof, and in a direction at right angles to the direction of the straight extension of the top coil of one spring to an adjacent one. It will thus be seen that a line of springs in one direction is connected by these extensions, and that a line in a direction at right angles by the stay wires or rods C, so that all of the springs are connected, and a smooth and substantial mattress-engaging surface is provided.

By means of the loop  $a$  the top coil of each spring is held to place by the next coil, while the connection of one spring with an adjoining one and a stay-rod in the manner described absolutely holds the spring from permanent lateral displacement, although permitting all needed vibration. Each spring is thus securely held in proper position relative to the others.

The outer line of springs on one side, instead of having the free end of the top coil carried to the adjacent spring, have said end first looped around the adjacent coil, as with the remainder of the springs, and then bent around the side bar of the frame D. A link or bar E is employed to connect each spring of such outer line to a stay rod or wire C, intersecting the inner side of the top coil and the adjacent spring where it intersects with a stay rod or wire C, the ends  $e$  of said links being secured precisely as are the free ends of the upper coils of the other springs, as above described.

It will be seen that I have a strong and durable bed, and yet withal one that is simple and easily made, and not apt to get out of order.

What I claim as new, and desire to secure by Letters Patent, is—

1. A coil spring for bed-bottoms in which the wire extends beneath the top coil, then directly between the top coil and itself, and then in the form of an extended horizontal arm, whereby the arm is fastened to the top coil while it is free to slide thereon; substantially as described.

2. A coil spring comprising a top coil hav-

ing its free end carried over the adjacent inner coil, then under it, then over it, and then under itself on the outside of the top coil to provide a single loose loop  $a$  and formed with  
5 a straight arm  $a^3$  and with an upward bend  $a^4$  having a pendent straight extension  $a'$  provided with a hooked extremity  $a^5$  extending parallel with the straight arm; substantially as described.

10 3. The combination of a coil spring having a top coil formed with a single offset  $a^2$ , the stay-rod having a single offset  $c'$  crossing the coil-offset and a coil spring having a connection formed with a straight arm  $a^3$  extending  
15 under the coil-offset and with an upward bend  $a^4$ , hooking over the crossed offsets, between the top-coil and stay-rod, having a pendent straight extension  $a'$  extending beyond the arm; substantially as described.

4. The combination of a coil spring having 20 a top coil formed with a single offset  $a^2$ , the stay-rod having a single offset  $c'$  crossing the coil-offset, and a coil-spring having a connection formed with a straight arm  $a^3$  extending under the coil-offset and with an upward bend 25  $a^4$  hooking over the crossed-offsets between the top-coil and stay-rod having a pendent straight extension  $a'$  extending beyond the arm, and provided with a hooked extremity  $a^5$  extending parallel with the straight arm; 30 substantially as described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOSEPH P. LEGGETT.

Witnesses:

ROBT. T. STICKNEY,  
CHAUNCEY B. STICKNEY.