

D. W. WHITAKER.
Springs for Bed-Bottoms.

No. 146,299.

Patented Jan. 6, 1874.

Fig. 1:

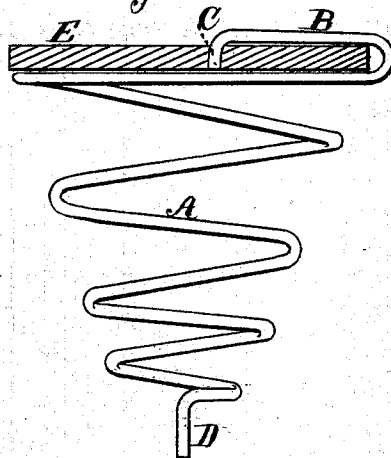


Fig. 2:

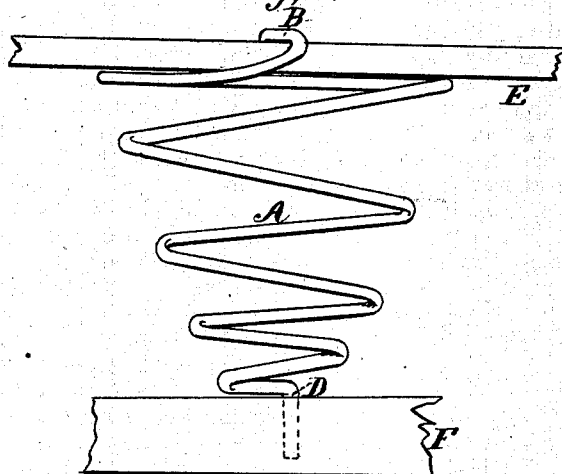
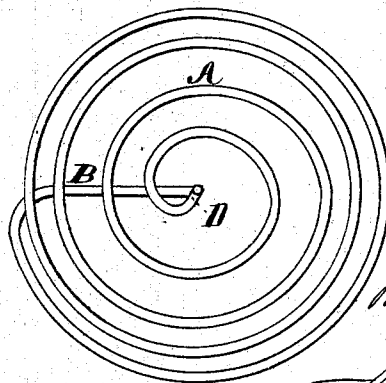


Fig. 3:



Witnesses:

West Wagner.
Wm. J. Peyton.

Inventor:

David W. Whitaker.
By his Attorney.
James L. Norris.
H

UNITED STATES PATENT OFFICE.

DAVID W. WHITAKER, OF FRANKLINTON, NORTH CAROLINA.

IMPROVEMENT IN SPRINGS FOR BED-BOTTOMS.

Specification forming part of Letters Patent No. **146,299**, dated January 6, 1874; application filed December 11, 1873.

To all whom it may concern:

Be it known that I, DAVID W. WHITAKER, of Franklinton, in the county of Franklin and State of North Carolina, have invented certain new and useful Improvements in Springs for Bed-Bottoms and other purposes, of which the following is a specification:

This invention has reference to a novel form of conical or conoidal spring for bed-bottoms, whereby the same is capable of being readily and firmly attached to the bed-slats or bearers without the use of nails, clasps, or other fastening devices. The invention consists in the employment of a conoidal spring, the large end or base of which is bent inward to form a curved shank, and in an upward direction to produce a point, which enters an opening in the slat or bearer, the manner of applying the spring being to insert the slat or bearer between the lower coil of the spring and the succeeding one, and then, by turning the spring in the proper direction, the same will be firmly clamped in position, the point which enters the slat serving materially to prevent the spring from working loose when the bed-bottom is in use.

Figure 1 is a detail view of my spring as applied to a slat. Fig. 2 is a detail view of a bed-bottom slat and bearer, showing my form of spring applied thereto. Fig. 3 is a detached view of the spring.

The spring A is of a conoidal or conical shape, and formed of coiled wire, with its large end or base provided with an inwardly-bent shank, B, which terminates in a vertical point, C, as shown. Said point C is located in the center of the base of the spring, and is in direct line with a vertical shank or prolongation, D, of the small end or vertex of the cone. Springs similar to the above are now extensively used in the formation of spring bed-bottoms, in connection with supporting slats and bearers; but invariably such springs, as heretofore constructed and applied, are liable to be detached from the slats by the movement

of the bed-bottom when in use, and, moreover, nails, clasps, and other fastening devices are generally used for securing the springs, thus rendering the same more difficult of application, and expensive in use.

By my invention I completely remedy the defects of the springs heretofore used, for all that is necessary to secure the spring in position in respect to the slats or bearers E F is to insert one of said slats between the last base coil and the preceding one, the point C entering a recess or opening in the slat, and then, by turning or rotating the spring on its axis thus formed, the angular portion or junction of the bent shank B, with the first coil of the spring, is caused to bear against the edge of the slat or bearer, which, in connection with the insertion of the point into the slat, serves to firmly retain the spring in position, notwithstanding all shocks or violent movements to which the bed-bottom may be subjected. The shank or point D of the small end of the spring is also inserted into a slot or bearer, as shown, and as the two points on the opposite ends of the spring are thus located in a direct line with each other, all the strain to which the spring is subjected will be evenly sustained by or divided over the entire area of the spring.

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

The inwardly-bent shank B of the conoidal-shaped spring, having a flat base, and formed with a vertical projecting point, C, at right angles with the shank B, for passing through an opening formed in the slat, substantially as described, for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 11th day of December, 1873.

DAVID W. WHITAKER.

Witnesses:

ALBERT H. NORRIS,
WM. J. PEYTON.