J. J. Smith,

Bed Bottom,

No. 83,001, Patented Oct. 13, 1868.

Fig: 1.

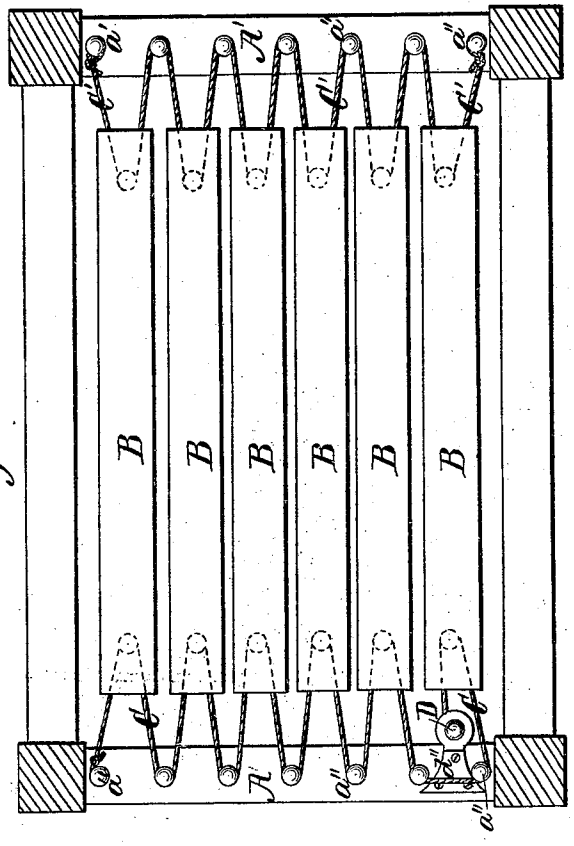
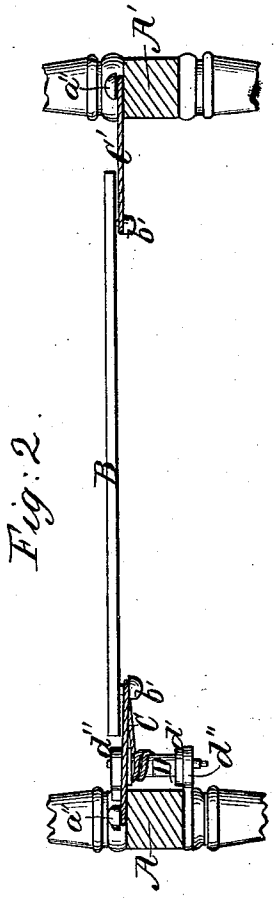


Fig: 2.



Witnesses;
Benj. Monstan
Chas. Smyser

Inventor;
Jacob J. Smith

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

United States Patent Office.

JACOB J. SMITH, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 83,001, *dated October* 13, 1868; *antedated October* 1, 1868.

IMPROVED BED-BOTTOM.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JACOB J. SMITH, of the city of Philadelphia, in the State of Pennsylvania, have invented a new and useful Improvement in Bed-Bottoms; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a plane view of the said improved bottom applied to a bedstead, and

Figure 2 a vertical longitudinal section of fig. 1.

Like letters of reference indicate the same parts when in both figures.

My invention relates to that class of bed-bottoms having springy wooden slats for supporting the bed; and consists in suspending the slats from two opposite rails of the bedstead by means of a cord applied near each end of the slats, so as to connect them to their respective rails, by passing alternately from the rail to the several slats around knobs, or their equivalents, fixed in the said rails and slats; and also in the employment, in combination with one of the rails and cords suspending the slats as stated, a winding-cylinder provided with a ratchet-wheel and pawl, and permanently attached so as to serve as a means of tightening or straining the cords between the rails and slats, substantially as hereinafter described and shown, for the purpose of producing a more elastic, inexpensive, and reliable slat bed-bottom.

Referring to the drawings, A and A′ are the two end-rails of a bedstead; B B, the slats; C and C′, the two cords; *a″ a″*, the rows of knobs in the rails; *c″ c″*, the respective knobs in the two ends of the slats; and D the tightening-cylinder, with ratchet-wheel and pawl.

The knobs *a″* and *c″* are made of hard wood, and glued fast in suitable holes made along in the upper edges of the rails, and in each end of the under sides of the slats respectively, the knobs *a″* being arranged so as to be opposite to the spaces between the slats, when the latter are suspended in the bedstead.

The slats B are of the usual thickness and width, and about six or eight inches shorter than the distance which is between the two rails, A and A′, from which they are suspended.

The cords C and C′ are of common bed-cord, or hemp rope.

The winding-cylinder, D, is of cast-iron, and rotates upon its journals in iron arms, *d″ d″*, which are fixed to one of the rails A, and has also a ratchet-wheel, *d′*, fixed on its lower end, which engages with a spring-pawl, not shown in the drawings, in the usual well-known manner.

The projecting lower end of the bottom journal is squared to receive a wrench or lever, for operating the cylinder in tightening the cords C and C′.

In applying this bed-bottom, one end of each cord, C C′, is looped fast to the first knob, *a″*, in its respective rail, and the first slat, B, then suspended between them by passing the cords around the respective knobs, *c″*, of the said slat, thence around the second knobs of the rails, and the knobs of the second slat, and so on until the whole of the slats, B, are thus suspended, when the free end of one cord, C′, is looped fast to the last knob of its rail A′, and the free end of the other cord, C, passed through a diametral hole in the cylinder D, and secured therein by a knot. The "bottom" can now be readily tightened in the bedstead by rotating the cylinder D, and thus winding the end of the cord C around it, the pawl and ratchet-wheel *d′* retaining the strain given to the cords C and C′, as represented in the drawings.

The slats being of a somewhat elastic or springy nature, and being suspended horizontally by the zigzagged cords C and C′, as described and shown, it will be seen that a very simple, inexpensive, reliable, and easily-adjusted spring-bed bottom is afforded.

Having thus fully described my improvement in bed-bottoms,

What I claim as new therein of my invention, and desire to secure by Letters Patent, is confined to the following, viz:

1. I claim an elastic bed-bottom, consisting of a series of separate wooden slats, B B, arranged parallel with each other and with the side-rails of the bedstead, and having a round knob, *b′*, fixed near each end, in the middle of the width of the under side of each slat, B, and the said slats suspended by means of two single cords, C and C′, which respectively pass in a strained or stretched manner from the knobs *b′* of the slats to like knobs, *a″*, fixed in the head and the foot-rails A A′, in the zigzagged or laced manner shown and described, for the purpose specified.

2. I also claim, in combination with the mechanical devices claimed in the preceding clause, the winding-apparatus D, arranged to operate substantially as and for the purpose described.

JACOB J. SMITH.

Witnesses:

BENJ. MORISON,

GEO. SNYDER.