J. E. PRAUL.

BED-BOTTOMS.

No. 185,779. Patented Dec. 26, 1876.

Fig: 1.

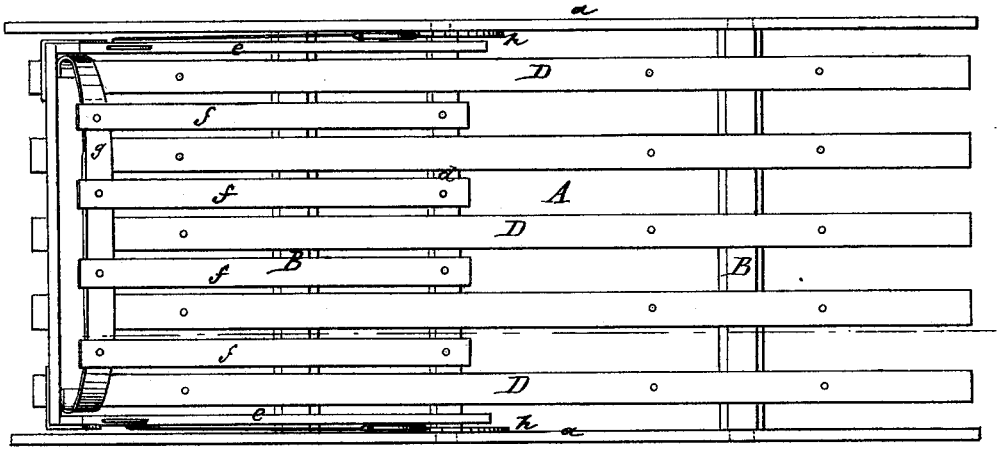
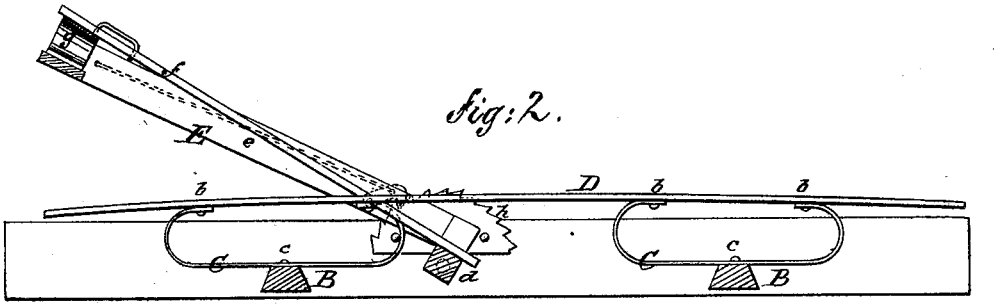


Fig: 2.



Witnesses.

M. Lovell

H. C. Mattenberg

Inventor:

John E. Praul

per Munn & Co.

Attys

UNITED STATES PATENT OFFICE.

JOHN E. PRAUL, OF NEW YORK, N. Y.

IMPROVEMENT IN BED-BOTTOMS.

Specification forming part of Letters Patent No. **185,779**, dated December 26, 1876; application filed October 23, 1876.

To all whom it may concern:

Be it known that I, JOHN E. PRAUL, of the city, county, and State of New York, have invented a new and Improved Bed-Bottom; and that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, making part of this specification.

This invention is in the nature of an improvement in bed-bottoms; and the invention consists in a bed-bottom constructed with transverse braces or bed-pieces, combined with double C-springs, which support the slats of the bed-bottom in two places, in the manner hereinafter described.

In the accompanying sheet of drawings, Figure 1 is a plan or top view of my improved bed-bottom, and Fig. 2 is a longitudinal section thereof.

Similar letters of reference indicate like parts in the several figures.

A represents a bed-bottom, with side pieces *a a*. These side pieces are united by braces or bed-pieces B B, extending across from one side piece to the other. These side pieces are beveled, so that their section is of triangular shape, the base of the triangle being downward. To the top of these bed-pieces B are secured a series of flat metal springs, C, in the form that is known as "double C-spring." The two ends of each spring are firmly affixed to the under side of each slat D, in such manner that a tension will be produced between each set of two springs on the two bed-pieces B, causing the slats D to assume a curve, as shown in Fig. 2, and keeping the slats in such curved position, so that when each of the slats is in this way curved the surface of the bed will assume a convex form.

This tension between each pair of springs, to form the curve just described, is independent of the tension of each spring, to produce the requisite vertical elasticity. This latter tension or elasticity is caused by the peculiar form of the springs, and the elasticity of the metal forming them.

It will be observed that, inasmuch as each separate spring is secured to each of the slats D at two points, as at *b*, each pair of springs placed on the two bed-pieces B affords four points of support to each slat, so that each slat is held firmly in a manner that will prevent its lateral displacement, and yet, at the same time, not interfere with the necessary vertical elasticity of the slats, and afford a slight lateral yielding to them.

The springs C are secured to the bed-pieces B by a rivet or bolt, *c*, and the sides of the bed-pieces being beveled off, as before mentioned, little or no obstruction is offered to the free action of the spring when it is pressed downward by the superincumbent weight, as when the bed is in use, and the springs are not liable to "set" by its being repeatedly bent over the sharp upper edges of the bed-pieces, as is the case when the sides of the bed-pieces are not beveled.

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

In a bed-bottom, double C-springs, each spring being secured to the slats of the bottom in two places, substantially as and for the purpose described.

JOHN E. PRAUL.

Witnesses:
H. L. WATTENBERG,
M. LOVELL.