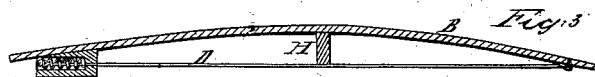
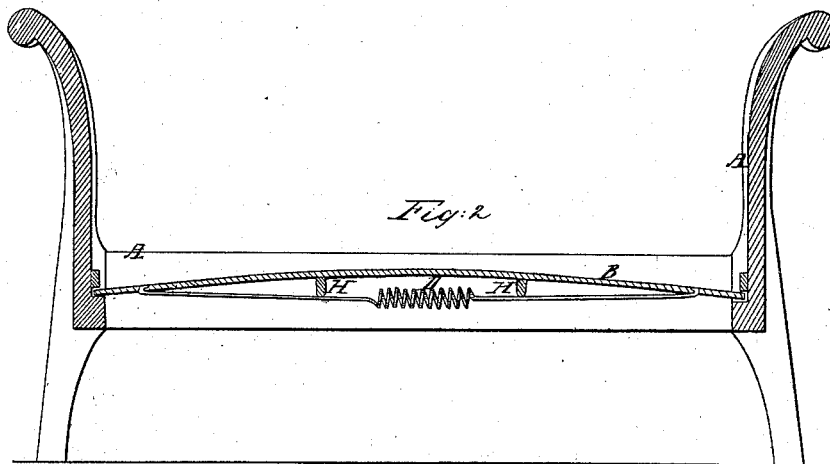
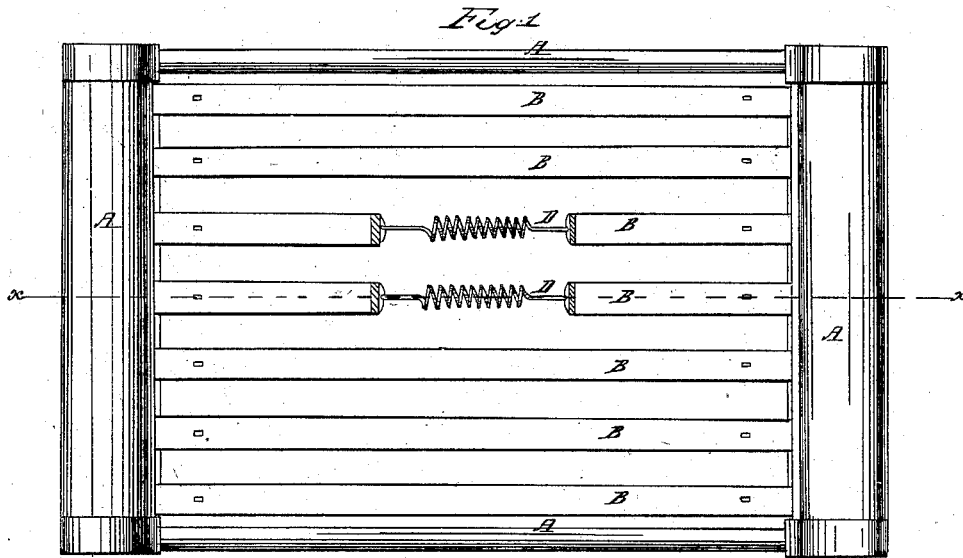


P. G. CHASE.  
BED BOTTOM.

No. 47,797.

Patented May 23, 1865.



Witnesses.  
Wm. A. & Hancock  
J. Smeitan

Inventor  
P. G. Chase  
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Attorney

# UNITED STATES PATENT OFFICE.

P. G. CHASE, OF BERLIN, WISCONSIN.

## IMPROVED BED-BOTTOM.

Specification forming part of Letters Patent No. **47,797**, dated May 23, 1865.

*To all whom it may concern:*

Be it known that I, P. G. CHASE, of Berlin, in the county of Green Lake and State of Wisconsin, have made certain new and useful Improvements in Slats for Bed-Bottoms, &c.; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a plan of a bedstead illustrating my invention, a portion of two of the slats being broken away to expose the springs located beneath. Fig. 2 is a vertical longitudinal section thereof in the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts in the two figures.

In the bed-bottom, the subject of my invention, each slat, supported at the ends as usual by a cleat or otherwise on the rails of the bedstead, has an independent elasticity, partly due to its own material and power of reassuming its normal proportions and camber, and partly owing to the expansible spring tension-rod beneath it and connected to its respective ends.

In order that others skilled in the art to which my invention appertains may be enabled to fully understand and use the same, I will proceed to describe its construction and operation.

A is a bedstead provided with slats B B. Each of the slats in the bedstead is made of wood or metal bent to any required curve so that it shall have a camber which under its ordinary load will assume a level. The strength of the slat is increased and its elasticity more perfectly secured by means of the chord D, which unites the two ends of the arc and forms an elastic spring tension-bar. This chord is shown with a series of coils at its middle portion at the end or at both ends, which expand or shut together, as the case may be, under the tension of the rod as the camber is pressed out of the slat, as will be readily understood. Stud or cleats H H', placed on the under side of the slat B and bearing upon the chord, admit of a further

vibration of the slat without allowing it to come in contact with the spring.

The proportions of the slats and their chords will vary with their lengths and with the purpose for which they are designed. This also depends upon whether they are arranged lengthwise or transversely. The former is preferred, as the weight of the body thrown upon transverse slats will bend some so much more than others as to raise the part toward the feet unpleasantly, whereas when arranged longitudinally the weight of the body is more evenly distributed, as the feet rest under ordinary circumstances upon the same slats which underlie the body.

The support of the slats is at their ends, and consists of the usual cleats or rabbeted mortises.

I do not limit myself to the application of the slat to bed-bottoms, but propose, without departing from the essential principle of my invention, to apply it in sofas, lounges, chairs, car-seats, sleeping-cars, and steamboat-berths.

The method shown in the drawings of applying the spring to the slat may be so modified as that it shall be drawn in or closed by the application of pressure upon the upper surface of the slat. There are several ways of doing this, and I do not limit myself to any particular method of applying the spring to the slat so long as I attain the end I desire by the application to the under side of a camber-slat.

Having thus fully, clearly, and exactly described the nature, construction, and operation of my invention, what I claim therein as new, and desire to secure by Letters Patent, is—

The improved spring-slat for bed-bottoms or analogous purposes, consisting of a camber-slat, B, in combination with the spring tension-rod D, connected to the slat at or near its ends for the purpose of increasing its power of resisting depression, substantially as described.

Witnesses:

WARREN JONES,  
S. J. ELLIS.

P. G. CHASE.