

*J. M. French,*

*Bed. Bottom.*

*N<sup>o</sup> 51,443*

*Patented Dec 12, 1865.*

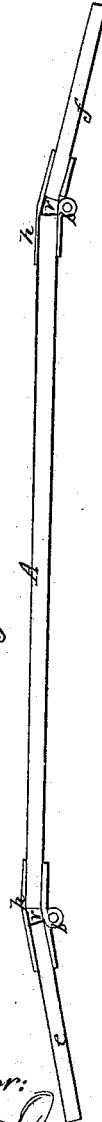
*Fig. 1*



*Fig. 2*



*Fig. 3*



*Witnesses:*

*Wm. Syme  
Geo. H. Loring*

*Inventor:*

*J. M. French  
Munn & Co  
Attorneys*

# UNITED STATES PATENT OFFICE.

JAMES M. FRENCH, OF EAST CAMBRIDGE, MASSACHUSETTS.

## SPRING-SLAT FOR BED-BOTTOMS.

Specification forming part of Letters Patent No. 51,443, dated December 12, 1865.

*To all whom it may concern:*

Be it known that I, JAMES M. FRENCH, of East Cambridge, in the county of Middlesex and State of Massachusetts, have invented new and Improved Spring-Slats for Bed-Bottoms; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of one form of my invention. Fig. 2 is a similar view of another form of my invention. Fig. 3 is a similar view of still another form of my invention.

My invention consists in so constructing a slat for a bed-bottom that a joint shall be formed between the part that rests upon the side rails of the bedstead and the body of the slat, into which joint is placed a piece of rubber or any suitable spring which will give to the slat the desired springing motion when the same shall be depressed, as will be presently described.

To enable others to understand my invention, I will proceed to describe it.

I propose several forms of applying and adapting my invention, as will be seen by reference to the drawings.

In Fig. 1 the slat A is made of the desired length to extend across the bedstead or lengthwise thereof, as the case may be, and on the under side of this slat, near each end, there is secured an arm, *a*, which, when not depressed, forms an angle with the slat. This arm *a*, however, is divided or made in two parts, and then connected together by a hinge, *b*, a leaf of the hinge being secured respectively to the two parts of the arm, and a space is left between the two ends over the joint of the hinge, and in this space there is inserted a piece of rubber, *r*, which will constitute a spring; or, instead of rubber, any suitable spring may be inserted to take its place—a spiral spring, for

instance—bearing against the ends of the two parts of the arm *a*.

In Fig. 2 the slat A is the same; but in lieu of using an ordinary hinge and making the arm *a* in two parts, I employ a hinge, B, of peculiar construction, one leaf being secured directly to the slat A and the other to an arm, *c*. The piece of rubber or spring in this case is placed between the shoulder *d* of the hinge and the end of the arm *c*, and effects the same object as in the previous instance.

To prevent the arms in these two examples of my invention from being forced too far from the slat A, I use a band, *g*, secured to the end of the arm and the end of the slats.

In Fig. 3 I dispense with the arms and peculiar hinges and make the slat itself in three parts, A *e f*, A being the central part and *e f* the end pieces, and hinges *b* are used to connect these parts, one leaf of the hinge being connected to the central part and the other to each end piece, respectively; and in this instance a space is left between the ends of the pieces A *e f* that approach each other, and the rubber or spring is inserted in this space. And to keep the rubber in place I secure a strip of leather, *h*, on the top of the slat over the rubber or spring.

These several examples all operate on the same general principle, as can be readily understood. Any downward pressure on the slats A will give the desired springing motion to the slats, and consequently to the bed.

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

Making a joint at each end of a bed-slat or attaching-arms, substantially as described, said joints being capable of receiving within them a piece of rubber or a spring, substantially as and for the purposes specified.

JAMES M. FRENCH.

Witnesses:

SAML. A. FRENCH,  
A. P. GRIFFING.