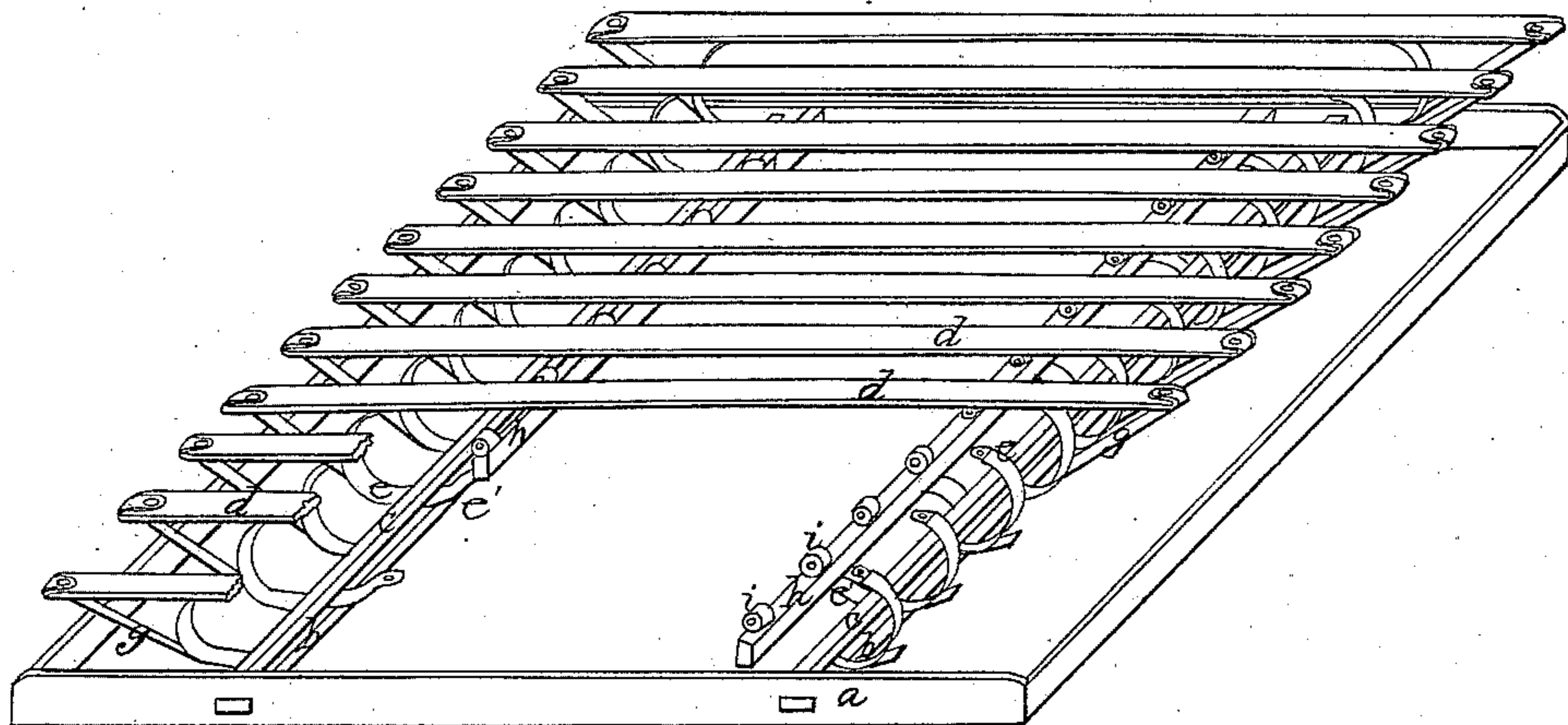


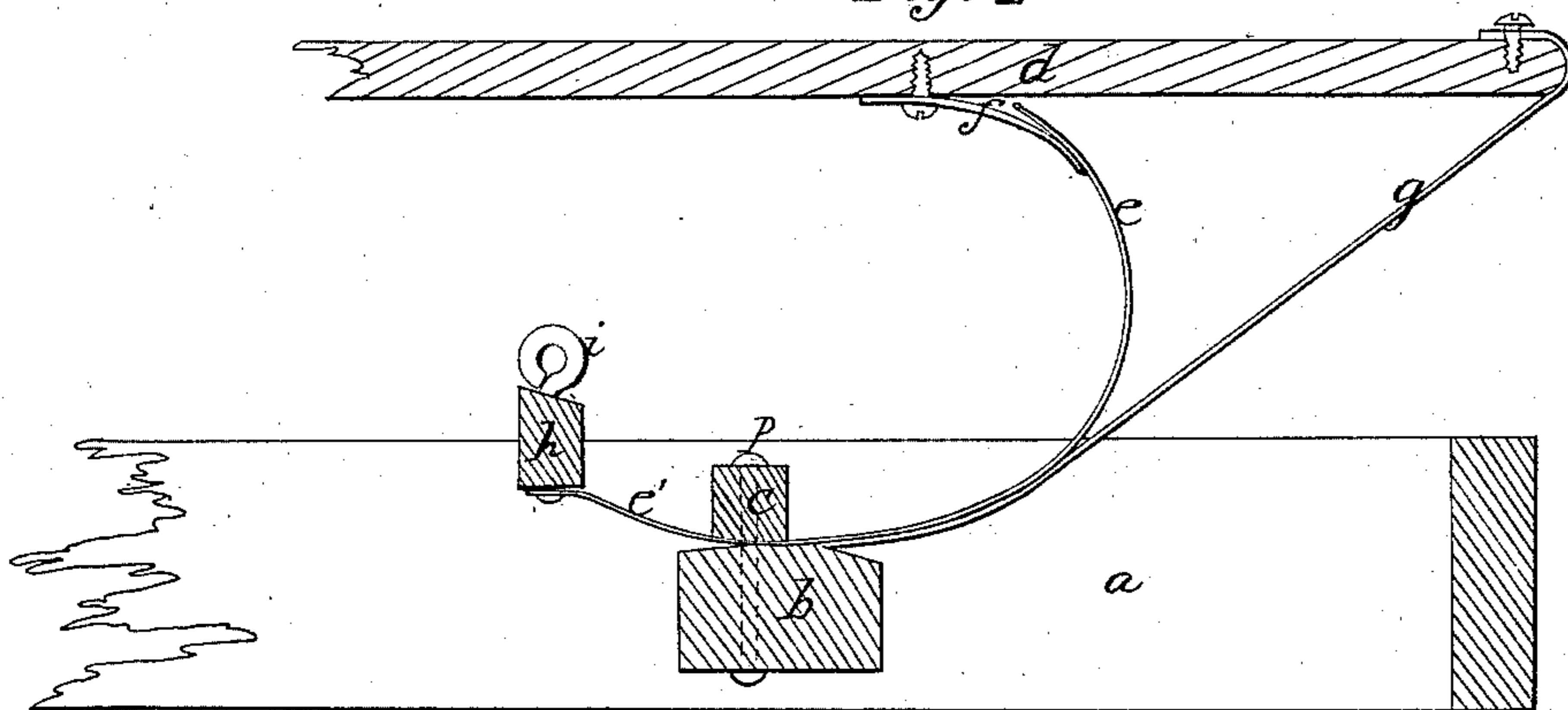
*F. S. Frost,*  
*Bed Bottom.*

*N<sup>o</sup> 66,481.*

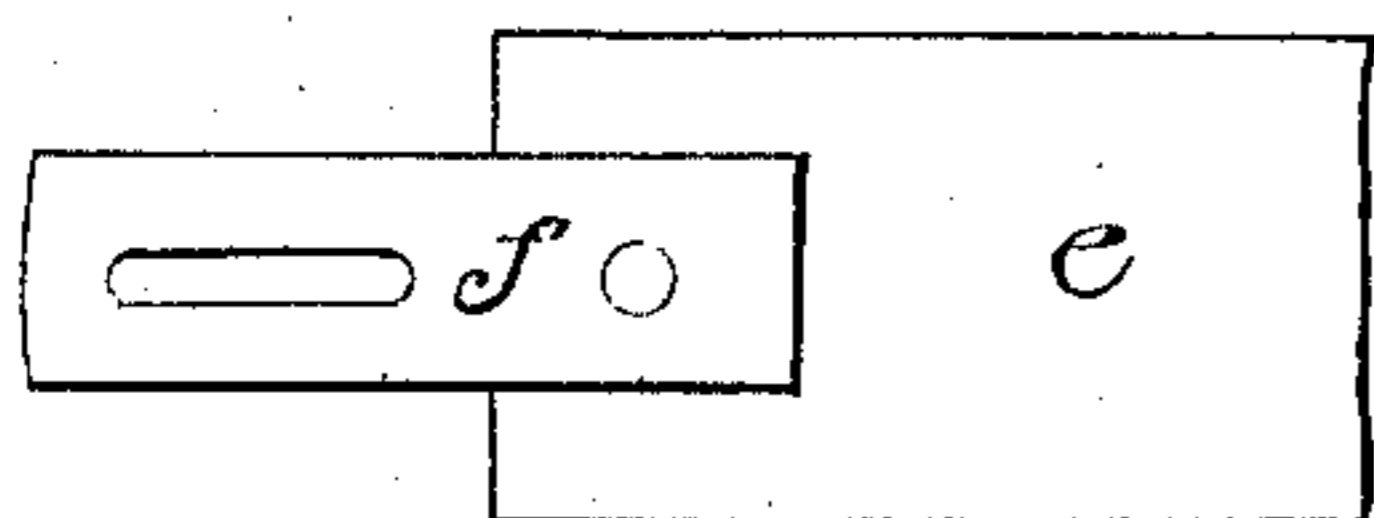
*Patented July 9, 1867.*  
*Fig. 1*



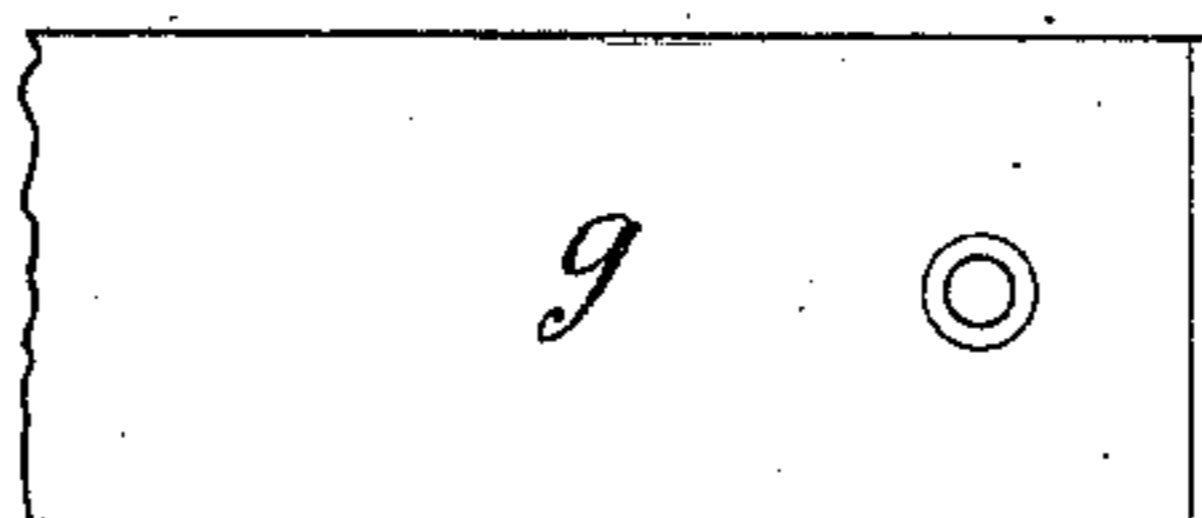
*Fig. 2*



*Fig. 3*



*Fig. 4*



*Witnesses:*  
*Charles Kelsey,*  
*J. H. Adams*

*Inventor:*  
*Francis S. Frost*

# United States Patent Office.

FRANCIS S. FROST, OF WEST CAMBRIDGE, MASSACHUSETTS.

*Letters Patent No. 66,481, dated July 9, 1867.*

## IMPROVED BED-BOTTOM.

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

Be it known that I, FRANCIS S. FROST, of West Cambridge, in the county of Middlesex, and State of Massachusetts, have invented a new and useful improvement in Spring-Bed Bottoms, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents a perspective view of a bed-bottom with my improvement.

Figure 2 is an elevation of the springs, showing the manner of attachment; and

Figures 3 and 4 are details of the same.

Similar letters indicate like parts in the several figures.

My invention consists in the employment of curved springs attached at their lower portions to the cross-bars of a bed-bottom, and at their upper ends to straps secured to the under part of the slats, in combination with straps which are attached at one end to the cross-bars underneath the springs, which they partially support, and extending to the ends of the slats, where they are secured in any suitable manner. It also consists in the use of additional cross-bars arranged between the aforesaid stationary cross-bars and supported upon springs, and also provided with elastic pads or pieces of India-rubber tubing for the purpose of preventing the slats from settling too low in the centre, the pads or rubber serving to prevent any noise from contact of the slats with said bars.

Referring to the drawings, *a* represents the main frame of the bed-bottom; *b b* are cross-bars firmly secured to the frame and supporting the springs *e*. Over the bars *b* are secured smaller bars, *c*, which are held in place by the pins or rivets *p* that pass also through the springs *e*. The spring *e* curves upwards, and at its upper end is attached to a strap, *f*, which is secured, as shown, to the under part of the slat, so that it can be readily attached or detached. The upper surface of the cross-bar *b* is rounded or curved so as to give an even support to the spring *e* when the latter is depressed by the weight on the slats. *g* is a strap of webbing or other suitable material, secured at one end to the cross-bar *b*, underneath the spring *e*, and at its other end is attached to the end of the slat *d*, as shown, whereby the spring *e* will be partially supported and the slat *d* will be prevented from any longitudinal movement. By tightening the straps *g* the ends of the slats may be drawn downwards and thus impart a curvature to their central portions, which may be regulated as circumstances require, so that when the slats become depressed by use their curvature may be readily restored. Two or more of the springs *e* may be made to extend beyond the bar *b*, towards the centre of the bed, as shown at *e'*, and support on their ends a cross-bar, *h*, upon which are placed, under each slat, an elastic pad or a section of rubber tubing. The object of this bar is to prevent the slats from sinking too low, and to furnish an additional support to the same. The elastic pads are designed to prevent any noise from contact of the slats with the additional bearings.

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

1. The combination of the springs *e*, connected by straps to the slats *d*, the bars *b* and *c*, and the straps *g*, as and for the purpose specified.
2. I claim the extended springs *e'*, in combination with the bars *b c* and the bar *h*, provided with the elastic pads *i*, as and for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANCIS S. FROST.

Witnesses.

J. H. ADAMS,

M. S. G. WILDE.