

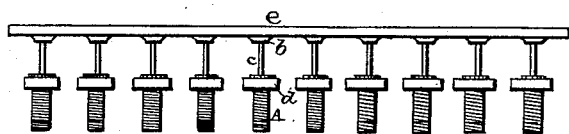
(No Model.)

S. COOK.  
BED BOTTOM SPRING.

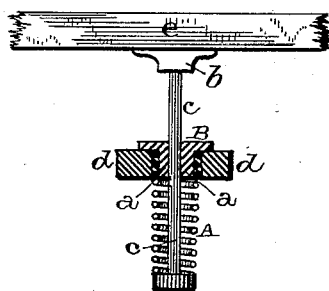
No. 264,630.

Patented Sept. 19, 1882.

*Fig. 1.*



*Fig. 2.*



Witnesses.  
*William H. Mortimer.*  
*W. H. Kern.*

Inventor  
*Smith Cook*  
per  
*F. A. Lehmann,*  
*att'y.*

# UNITED STATES PATENT OFFICE.

SMITH COOK, OF TITUSVILLE, PENNSYLVANIA.

## BED-BOTTOM SPRING.

SPECIFICATION forming part of Letters Patent No. 264,630, dated September 19, 1882.

Application filed May 27, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, SMITH COOK, a citizen of the United States of America, residing at Titusville, in the county of Crawford and State of Pennsylvania, have invented certain new and useful Improvements in Bed-Bottom Springs, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to an improvement in bed-bottom springs; and it consists in suspending closely-wound spiral springs in holes through slats crossing the bedstead and upholding them by heads to which the springs are attached that rest on top of the slats, while from the under side of slats laid crosswise over the former enter rods into the springs and rest upon plugs inserted at their lower ends, so that by a downward pressure on the upper layer of slats the springs upholding it are made to expand, as will be fully described hereinafter.

The accompanying drawings represent my invention. Figure 1 is a side elevation of my invention. Fig. 2 is a detail view of the same.

A represents a closely-wound spiral spring, the upper end of which is embedded in a screw-thread around a short cylinder, *a*, that has at its upper end an enlargement in the form of a flat head, B.

Through the center of the head B and cylinder *a* is a hole for the passage of a rod downward to the end of the spring, where it rests upon a plug that closes the lower opening.

There are two layers of slats forming the bed-bottom, the lower one, *d*, running crosswise and the upper one, *e*, lengthwise a few inches above the former. In the slats *d* holes are made of a diameter sufficient to allow the

springs A to pass through, they being upheld by the flat heads B on top of the slats.

To the under side of the slats *e*, at distances to coincide with the holes in the slats *d* underneath, are attached sockets *b*, in which are loosely held rods *c*, which rods are of a length to reach to the lower ends of the spiral springs, in which they are inserted through the holes in the heads B, and resting upon the plugs keep the upper slats several inches apart from the lower ones. Thus any pressure exerted downward on the upper slats is, by means of the rods *c*, brought to bear against the plugs in the lower end of the springs, causing the springs to expand downward and to contract when the pressure is removed. The mattress and bedding being placed on the upper layer of slats are, by this arrangement, rendered permanently elastic, and the degree of elasticity can be varied by lengthening or shortening the springs.

Having thus described my invention, I claim—

1. In spring bed-bottoms, the spiral springs A, in combination with cylinders *a*, heads B, and slats with holes *d*, arranged as described.

2. In spring bed-bottoms, the combination of slats *e*, sockets *b*, rods *c*, and springs A, arranged as shown and described.

3. In a spring bed-bottom, two layers of slats crossing each other, underneath the lower of which are suspended the springs, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

SMITH COOK.

Witnesses:

LOUIS MOESER,  
T. F. LEHMANN.