(No Model.)

M. N. LOVELL.

ADJUSTABLE SPRING BED BOTTOM.

No. 301,136. Patented July 1, 1884.

Fig 1.

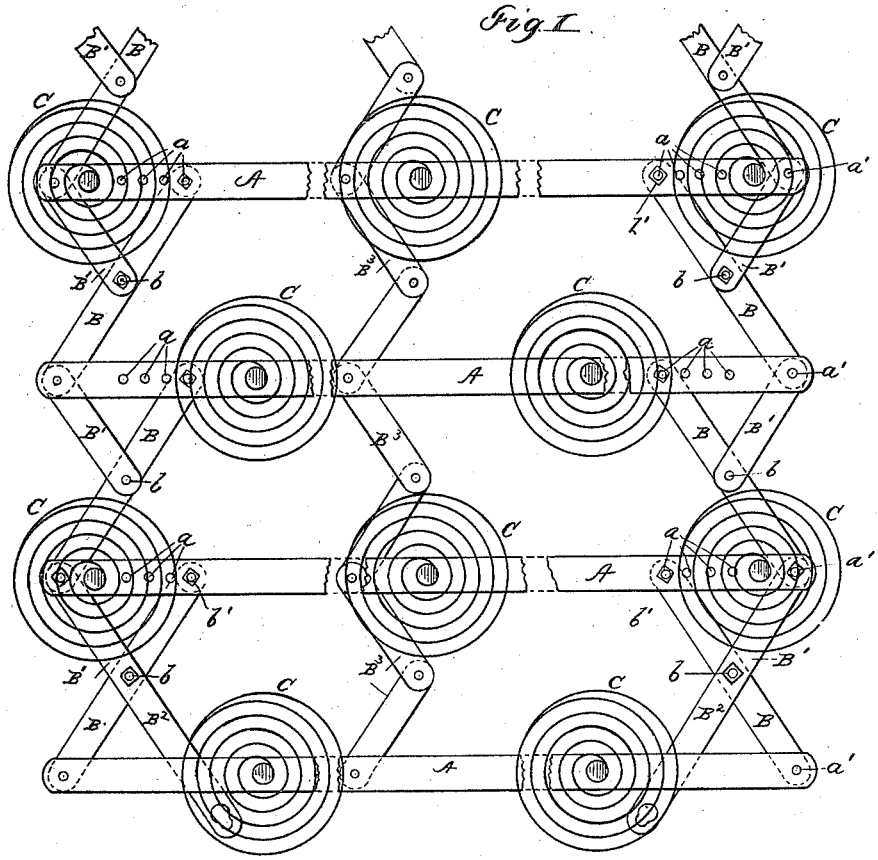
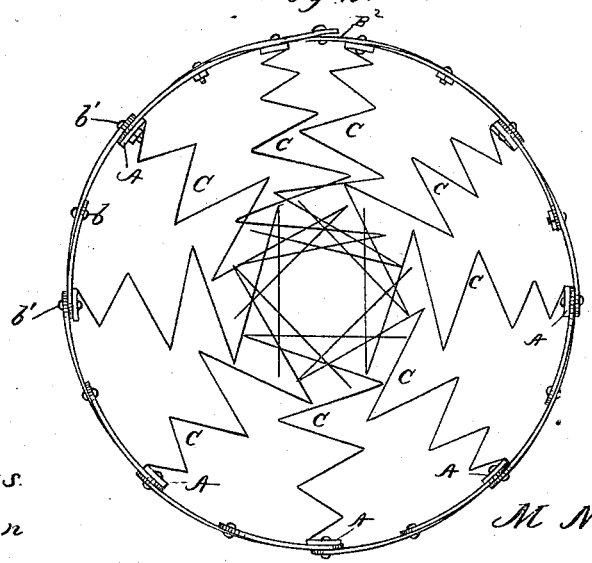


Fig 2.



Witnesses.
W. R. Edelen
Robt. H. Porter.

Inventor
M N Lovell
Per Hallock & Hallock
Att's

UNITED STATES PATENT OFFICE.

MELVIN N. LOVELL, OF ERIE, PENNSYLVANIA.

ADJUSTABLE SPRING BED-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 301,136, dated July 1, 1884.

Application filed June 9, 1883. (No model.)

To all whom it may concern:

Be it known that I, MELVIN N. LOVELL, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Adjustable Spring Bed-Bottoms; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to spring bed-bottoms, and particularly to that class which are made of slats and springs and are adapted to be adjusted as to width; and it consists in new and improved devices for effecting the said adjustment.

The objects of the invention are, first, to provide means whereby any one of the longitudinal slats may be adjusted with relation to the adjoining slat without affecting the relative position of any of the other slats, and, second, to so construct the said adjustable parts that the bed-bottom may be rolled up and secured in a roll at any point of adjustment.

The invention consists of constructions and combinations, all as will hereinafter be described in the specification, and pointed out in the claims.

The invention is illustrated in the accompanying drawings as follows:

Figure 1 is a plan view of the bed. Fig. 2 is an end view of the bed rolled up.

A A A, &c., are the longitudinal slats, with springs C C C, &c., mounted thereon in the usual manner.

B B′ B^2 B^3 are the parts forming the cross-strips, the construction and operation of which constitute the essential features of this invention, and are as follows: The end cross-stays are formed of the parts B B′ B^2, and the inner or middle cross-stays are formed of the parts B^3. All of these parts, B, B′, B^2, and B^3, are made of pieces of thin flexible metal—such as steel—and therefore permit the bed to be rolled up when desired, as seen in Fig. 2. In the central stays the parts B^3 are simply jointed together and to the longitudinal strips in such a manner that the said longitudinal strips may be moved from or toward each other at will. The end stays are formed of the parts B B′ B^2. The parts B^2 are only extensions of the parts B′ at each side of the bed, and carry the clasps by which the bed is held together when rolled up. Said parts B′ perform no other function or office, so that practically the end stays are formed of the parts B and B′ only. Between each of the longitudinal slats, and connected therewith, are one each of these parts B and B′. The parts B extend diagonally from one slat A to another, and the part B′ from one slat A diagonally to the middle of the part B, thus forming a Y-shaped section, which is in effect a toggle, the points of connection being all pivotal, except that at *b′*, which is adjustable in a series of holes, *a a a a*, by a screw-bolt. Now, it will be seen that any change of this connection *b′* from one hole *a* to another will throw the connected slats A from or toward each other parallelly, and any such change in one section of the bed will not affect any of the other sections; so, therefore, any two slats A can be adjusted more or less apart and not affect the relative position of any of the other strips A. The advantage of this construction is that in the adjustment of the bed reference can be had to the requirements. For instance, if the bed is to be occupied by two persons, one of whom is large and the other small, the springs can be made closer together on the side to be occupied by the larger person. The essential feature of this construction lies in the Y-shaped section B B′, having its stem B pivoted by its foot to one slat A, its arm B′ pivoted to another slat A, and also pivoted to the stem between the slats, and the head of its stem connectable with any one of a series of holes, *a a a*, &c., in the slat to which the arm B′ is pivoted. The control of the adjustment is wholly on the longitudinal strips, and is effected by changing the adjustment in the holes *a a*, &c., and thus changing the angle of the arms of the Y-shaped section. In place of the holes *a a a*, &c., and the bolts *b′*, a clamping device may be employed to secure the end of the part B upon the strip A at various points.

I am aware that spring bed-bottoms formed of slats and springs have been made adjustable by having the cross-stays formed of sections which are pivoted together, and each section is pivoted in the middle to one of the longitudinal slats, (see patents to Le Quesne, November 28, 1876, and June 28, 1881;) but

such a construction is different from mine and the effects secured are different. See also the patent to Bukeley, June 20, 1882, and Fowler, November 9, 1880. In the latter patent is shown a bed which is not only adjustable in width, but will also roll up; but the construction is in no way similar to mine.

I am aware of the construction shown in Letters Patent No. 279,013, dated June 5, 1883, in which the connecting-stays between the slats consist of a rigid V-shaped piece and a straight piece with adjusting-holes hinged to the point of the V-shaped piece, and also of the construction shown in Letters Patent No. 286,166, dated October 9, 1883, in which there are stays for the slats, which extend across two or more slats and intersect each other in the form of a Y, but are not so adjusted between each of the slats as to make each slat separately adjustable, as above set forth. Neither of these constructions embodies my invention, and I disclaim as any part of my invention all of the parts there shown.

What I claim as new is—

1. The combination, in a spring bed-bottom formed of slats and springs, of the parallel slats A A, &c., and the cross-stay sections B B′ between each of the parallel slats, of which the part B connects adjoining slats A, and is adjustably connectable upon one of the connected slats, substantially as and for the purposes mentioned.

2. The combination, in a spring bed-bottom formed of slats and springs, of the parallel slats A A, &c., and the cross-stay sections B B′ between each of the parallel slats, formed of thin elastic or flexible metallic strips, which are jointed together and to the said slats at the points b, a', and a', and adjustably connectable to said slats at b', in a manner substantially as shown, whereby the said bed-bottom may be varied in width and rolled up in a roll, substantially as shown.

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

MELVIN N. LOVELL.

Witnesses:
W. S. BROWN,
ROBT. H. PORTER.