(No Model.) 2 Sheets—Sheet 1.

W. BULKELEY & R. C. BROWNING.

BED BOTTOM.

No. 317,922. Patented May 12, 1885.

Fig. 1.

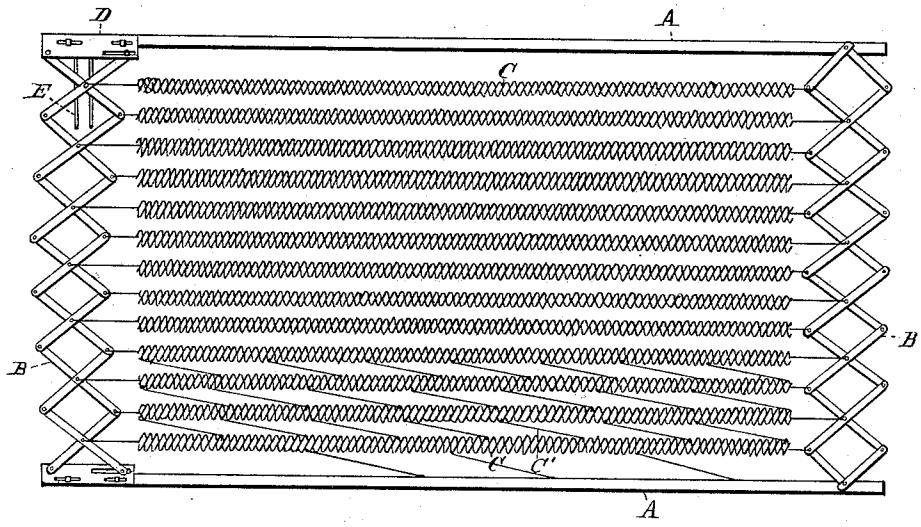


Fig. 2.

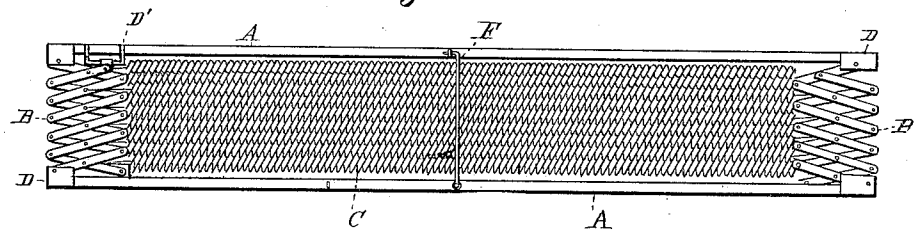


Fig. 3.

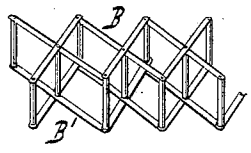


Fig. 4.

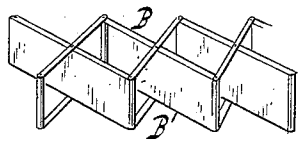
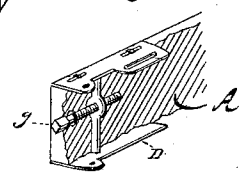


Fig. 5.



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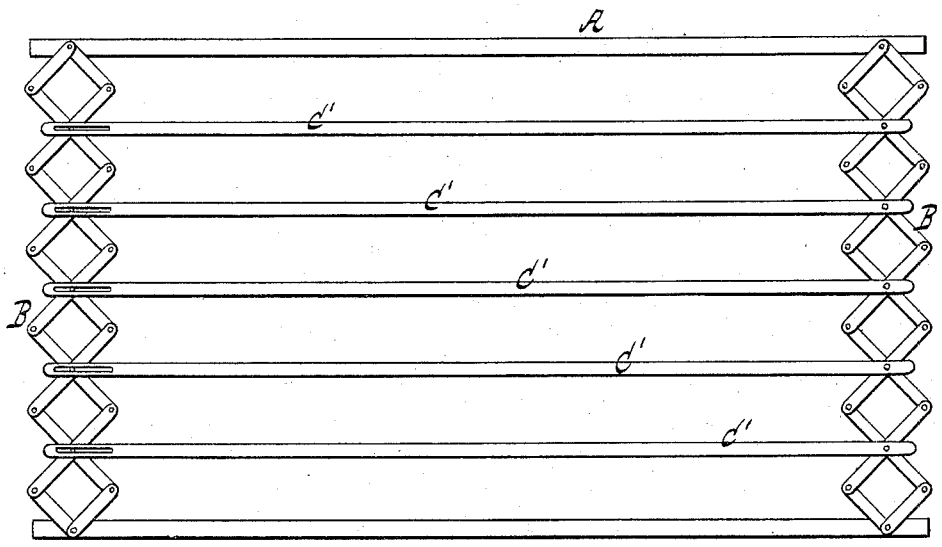
(No Model.) 2 Sheets—Sheet 2.

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Fig. 6.



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UNITED STATES PATENT OFFICE.

WORTHINGTON BULKELEY, OF CLEVELAND, OHIO, AND ROSS C. BROWNING, OF ORANGE, NEW JERSEY, ASSIGNORS TO FREDRICK T. BROWNING, OF NEW YORK, N. Y.

BED-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 317,922, dated May 12, 1885.

Application filed July 24, 1884. (No model.)

To all whom it may concern:

Be it known that we, WORTHINGTON BULKELEY, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, and ROSS C. BROWNING, a citizen of the United States, residing at Orange, in the county of Essex and State of New Jersey, have invented new and useful Improvements in Bed-Bottoms, of which the following is a specification.

Our invention relates to that class of bed-bottoms which are adjustable in width; and it consists in the novel features of construction hereinafter described, whereby an article of this character possessing superior strength and durability is obtained at a low cost of manufacture.

In the accompanying drawings, Figure 1 is a plan view of my bed-bottom showing it extended. Fig. 2 is an inverted plan view of my bed-bottom showing it contracted. Figs. 3, 4, and 5 are detail views of parts. Fig. 6 shows a modification.

Similar letters indicate corresponding parts.

The letters A A designate side rails, to which are pivoted the end arms of lazy-tongs B B′, so that the rails are connected together by that means while they are capable of being moved toward or away from each other, for expanding and contracting the structure. A link, F, serves to hold the rails in the inner positions which they assume when the bed-bottom is contracted. The position of the lazy-tongs B B′ is at the opposite ends of the side rails, and two pairs thereof are used for holding the rails in proper relation to each other, each pair of the lazy-tongs lying in the plane of the other, which is a horizontal plane. To one pair of the lazy-tongs is connected a series of spiral springs, C, which may be connected together by diagonal braces C′, to form an elastic support, which constitutes the bed-bottom proper, these springs being in planes parallel to the side rails so that they accommodate themselves to the condition of the lazy-tongs as well as to the positions of the rails. In the example shown the springs C are connected to the inner and middle joints of the lazy-tongs; but they may be connected thereto at any other suitable points, and instead of the springs any other suitable elastic support may be used.

If desirable, the lazy-tongs may be provided with braces E, Fig. 1, and when the two pairs B B′ of lazy-tongs are used, one set of the arms of each pair may be made in one piece with the corresponding arms of the other pair, as shown in Fig. 4.

The points at which the lazy-tongs B B′ are pivoted to the side rails may be at the junctions of the end arms or at the extremities thereof, and when at the extremities the rails should be provided with guides for the pivoted ends of one of the arms, either in form of a slotted plate, D, Figs. 1 and 5, or a loop, D′, Fig. 2, secured to the rails, the slotted plate, when such is used, being capable of adjustment by means of a set-screw, *g*, as shown in Fig. 5.

In lieu of the spiral springs C, slats C′, Fig. 6, of sheet-steel or other suitable material may be used, such slats being provided with slots to connect with the proper joints of the lazy-tongs, or being left detached from the tongs to be laid thereon when desirable.

We are aware that various styles of beds have been made through the medium of lazy-tongs, as in Patent No. 30,888, and also that a bed-bottom has been composed of an upper and lower series of slats and interposing springs with the slats connected intermediate their ends by upper and lower pivoted links. Such, therefore, we do not claim.

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

1. The combination, in a bed-bottom, of the side rails, A A, a pair of horizontal lazy-tongs, B B′, arranged at each end of the side rails and connecting the latter for holding them in proper relative position, the lazy-tongs B of each pair being above and connected intermediate their ends with the other lazy-tongs, B′, and the support connected at its ends only with the upper lazy-tongs of the two pairs, substantially as described.

2. The combination, in a bed-bottom, of the side rails, the lazy-tongs arranged in horizontal planes and connecting the opposite ends of both side rails, and the horizontal spiral

springs connected at the ends respectively with the lazy-tongs in planes parallel to the side rails, substantially as described.

3. The combination, in a bed-bottom, of the side rails, A A, a set of horizontal lazy-tongs, B B', at each end of and connecting the side rails, said lazy-tongs lying in the same horizontal plane, and the horizontal spiral springs C, connected at the ends respectively with the lazy-tongs in planes parallel to the side rails, substantially as described.

In testimony whereof we have hereunto set our hands and seals in the presence of two subscribing witnesses.

WORTHINGTON BULKELEY. [L. S.]
ROSS C. BROWNING. [L. S.]

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E. F. KASTENHUBER.