(No Model.)

W. BULKELEY.

SPRING MATTRESS OR BED BOTTOM.

No. 262,365. Patented Aug. 8, 1882.

Fig. 1.

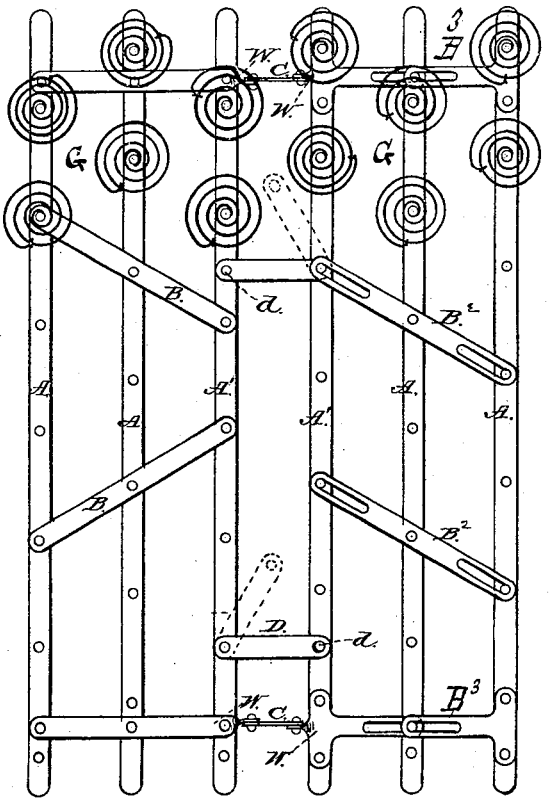


Fig. 3.

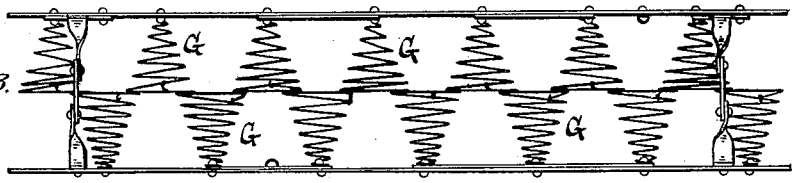


Fig. 2.

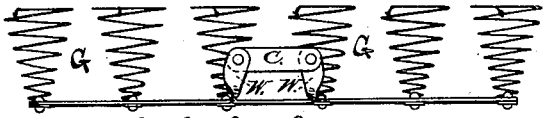


Fig. 4.

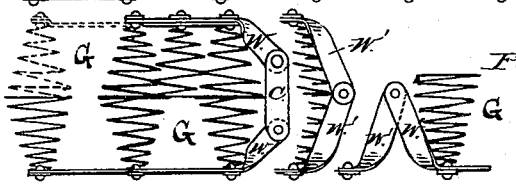
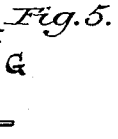


Fig. 5.



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UNITED STATES PATENT OFFICE.

WORTHINGTON BULKELEY, OF CLEVELAND, OHIO.

SPRING MATTRESS OR BED-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 262,365, dated August 8, 1882.

Application filed February 6, 1882. (No model.)

To all whom it may concern:

Be it known that I, WORTHINGTON BULKELEY, a resident of Cleveland, county of Cuyahoga, and State of Ohio, have invented certain new and useful Improvements in Spring Mattresses or Bed-Bottoms; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

My invention relates to mattresses or bed-bottoms constructed with a supporting-frame and spiral springs.

It has for its object the production of a bed-bottom which may be readily folded up for transportation and as readily adapted to beds of different widths.

In the accompanying drawings, Figure 1 is a plan view of my improved folding spring bed-bottom; Fig. 2, an end view of the same opened out; Figs. 3 and 4, side and end views of the same when folded up; Fig. 5, a detached view, illustrating a modification in the hinged joint.

The foundation of this spring bed-bottom consists of a series of parallel slats, A A, connected by means of transverse strips B B B^2 B^2. These transverse connecting-strips may be either rigidly secured to the slats, as shown at B B, or, in order to adapt it for use upon beds of different widths and for greater convenience in transportation, may be hinged to one of the slats and made to extend diagonally over the others and be connected thereto by a slotted sliding joint, as shown at B^2 B^2. In combination with these diagonal jointed connecting-strips B^2 B^2 brace-plates B^3 B^3 are employed to prevent a longitudinal movement of the slats in opening and closing. These brace-plates are secured to the slat to project at a right angle thereto over the next slat, to which it is connected by means of a slotted sliding joint, a pin, *t*, on the slat being made to project through a slot in the brace-plate B^3, as shown in Fig. 1. The two middle slats, A′ A′, of the bed-bottom are connected by hinged joints formed by two or more pairs of bent bars, W W, properly secured thereto, whose ends, projecting from the slats at a right angle thereto, are each bent up at an angle to the plane of the slat, as shown in the drawings, and are at the same time twisted so as to bring the face of the projecting end of each in a plane at right angles to that of the slat. These ends are either hinged directly together, as seen in Fig. 5, or otherwise, and preferably are connected by an intermediate pivoted link, C, as clearly shown in Figs. 2 and 4 of the drawings. One or more stay-bars, D, pivoted to one of the middle slats, extend across to the other. Each stay-bar is provided with an eye upon its outer free end to fit over a stud, *d*, upon the opposite slat. (See Fig. 1 of the drawings.) These stay-bars, when thus extended from the one slat to the other and secured by the stud, as described, prevent the bed-bottom from folding up or giving at its joint. When it is desired to fold the bed the stay-bars are disengaged from the stud and swung back upon the slat, as shown by the dotted lines, Fig. 1.

The bed-bottom thus constructed of a series of slats adapted to be folded and doubled over by means of central hinges, W W, is completed by securing upon said slats a series of conical wire springs, G G, arranged either in regular or alternate order upon the slats to which they are secured, and these springs may be coupled together by means of coiled wires connecting their upper ends, which serve to secure them properly and yet allow them free play, and at the same time permit the bed-bottom to be readily folded, or they may be otherwise coupled by flexible links or chains of webbing. Where the slotted bottom is made adjustable, as shown on the right in Fig. 1, one or more of the pins projecting through the slots in the diagonal strips may be threaded and provided with thumb-nuts, whereby the strips may be locked and the bed-slats fixed at any point of adjustment.

I am aware that bed-bottoms have been heretofore constructed with jointed or hinged foundation-pieces; but

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

1. In a jointed folding bed-bottom upon the slats of which are secured spiral springs, the combination, with the springs and slats, of the hinge-bars W W, secured to the slats and bent upwardly toward the top level of the springs,

and whose ends are twisted to connect and form a pivoted joint at right angles to the plane of the slats, substantially as and for the purpose herein set forth.

2. In a spring bed-bottom constructed in folding divisions, the combination, with a pair of hinge-bars, W W, secured to and projecting upwardly and outwardly from the adjacent slats, and twisted so that their outer faces shall project in a plane at right angles to the face of the slats, of an interposed connecting-link, C, pivoted at each end to the end of the hinge-bars, substantially in the manner and for the purpose herein set forth.

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

WORTHINGTON BULKELEY.

Witnesses:
JOHN T. MORTON,
L. H. WARE.