

G. W. HATCH.
Spring Bed-Bottoms.

No. 158,413.

Patented Jan. 5, 1875.

Fig. 1.

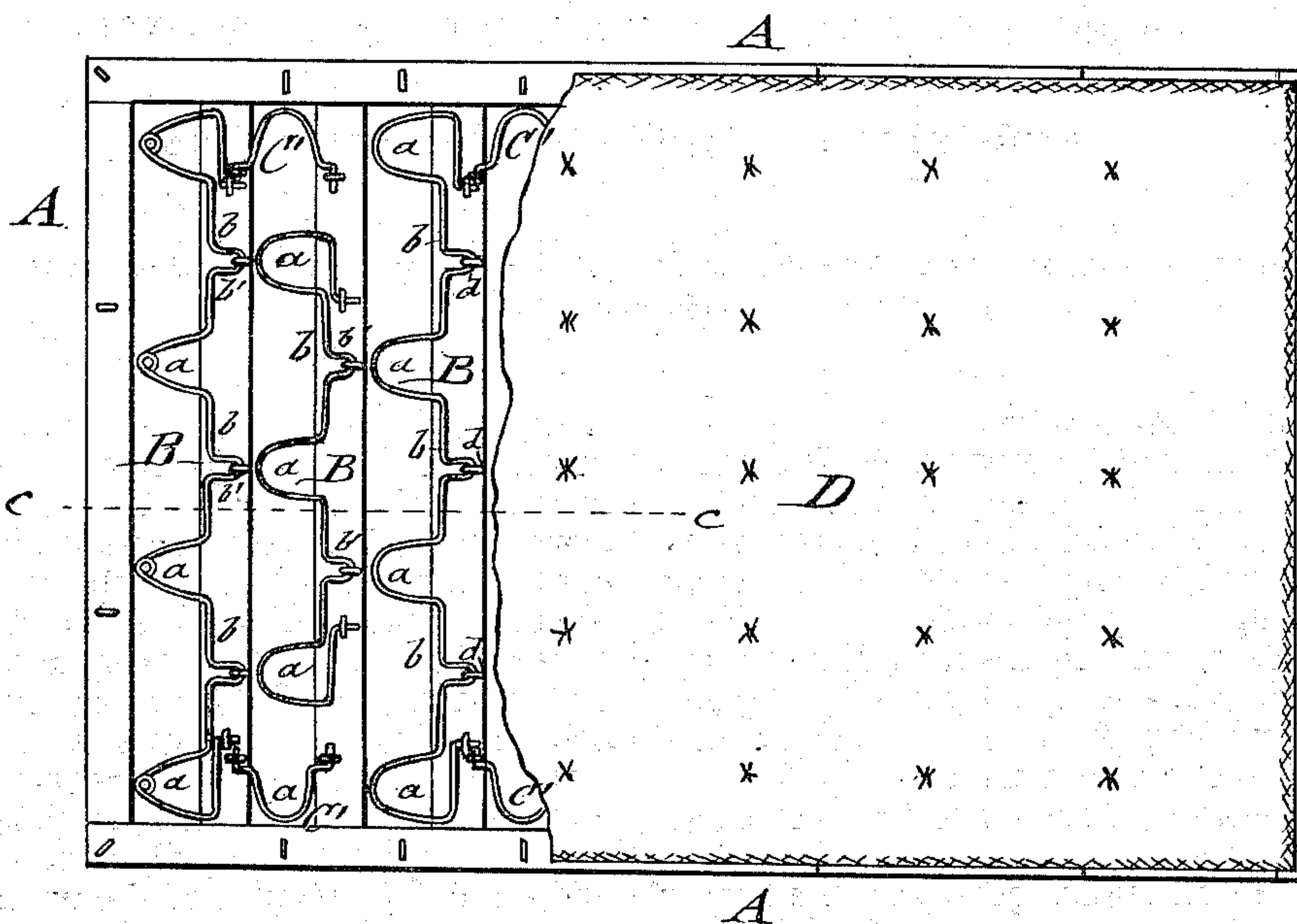
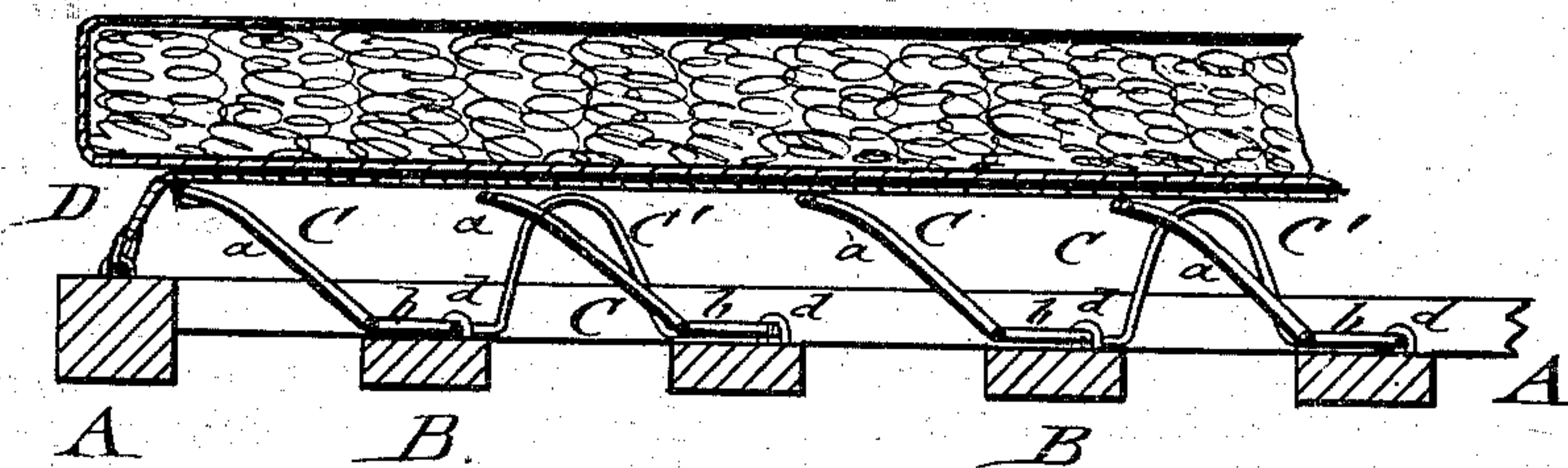


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

GEORGE W. HATCH, OF FOND DU LAC, WISCONSIN.

IMPROVEMENT IN SPRING BED-BOTTOMS.

Specification forming part of Letters Patent No. **158,413**, dated January 5, 1875; application filed October 24, 1874.

To all whom it may concern:

Be it known that I, GEORGE W. HATCH, of Fond du Lac, in the county of Fond du Lac and State of Wisconsin, have invented a new and Improved Spring Bed-Bottom, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a top view of my improved spring bed-bottom; and Fig. 2, a vertical longitudinal section of the same on the line *c c*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The invention relates, chiefly, to the form of the wire springs, as hereinafter described.

In the drawing, A represents the outer frame of a spring bed-bottom; B, the lateral slats attached to the same, and C the lateral springs secured to the slats. The springs C are bent of sheet-wire of suitable strength, in such a manner that at proper intervals U-shaped curved parts *a* are formed, which are bent under suitable inclination to support the superimposed parts of the bed. The intermediate parts *b* between the springs are straight, and rest on the slat, being provided with a central eye or hook-shaped part, *b'*, for being firmly secured by the staples *d* to the slats. The side ends of the spring parts are bent back and secured in similar manner. The intermediate parts *b* form thus the base-supports on the slats for the curved and inclined spring parts. The springs C are arranged laterally on the slats, in such a manner that the inclined spring parts of two adjoining slats alternate with each other, and extend over the base parts of the next adjoining slat B, for distributing thereby uniformly the re-

sistance of the springs over the whole bed-bottom. Short U-shaped side springs C' connect two adjoining slats, the lateral springs at every other slat being correspondingly shortened, the springs being inclined in outward direction, and secured by short straight base ends and staples, in similar manner as the lateral springs, for taking up the side pressure and retaining the mattress at equal height along the outer parts, so frequently thrown into use. A suitable canvas sheet or covering, D, is stretched rigidly over the springs, and applied to staples of the outer frame, A, for equalizing the action of the springs, and giving an even support to the mattress, or other part placed thereon, without injuring the same.

The resistance of the inclined spring part may be increased by a spiral twist, being bent into the apex or rounded end of the same, as shown, for supporting the head end in Fig. 1.

Thus a very simple, evenly-resisting, light, and durable spring bed-bottom is produced.

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

In a bed-bottom, the wire springs C, each formed of a series of bends, *a*, having an upward inclination, straight connecting portions *b*, and eyes *b'*, said springs being arranged lengthwise of the slats B, as shown and described.

GEORGE W. HATCH.

Witnesses:

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