HANSON HARD.

Improvement in Spring Bed Bottoms.

No. 121,169. Patented Nov. 21, 1871.

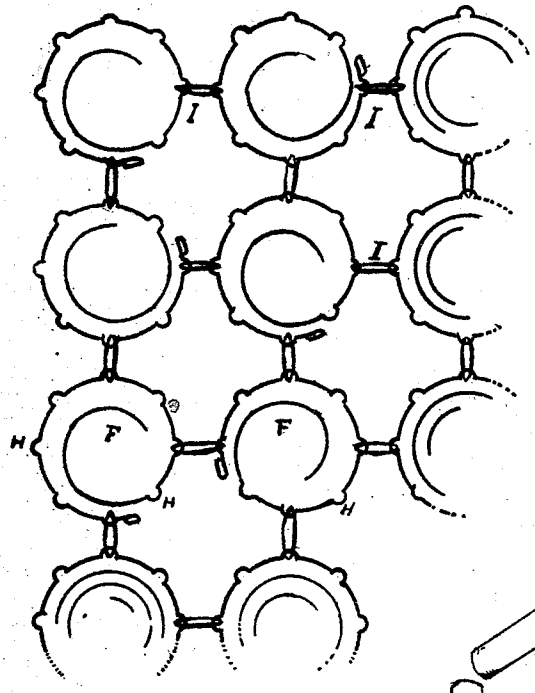
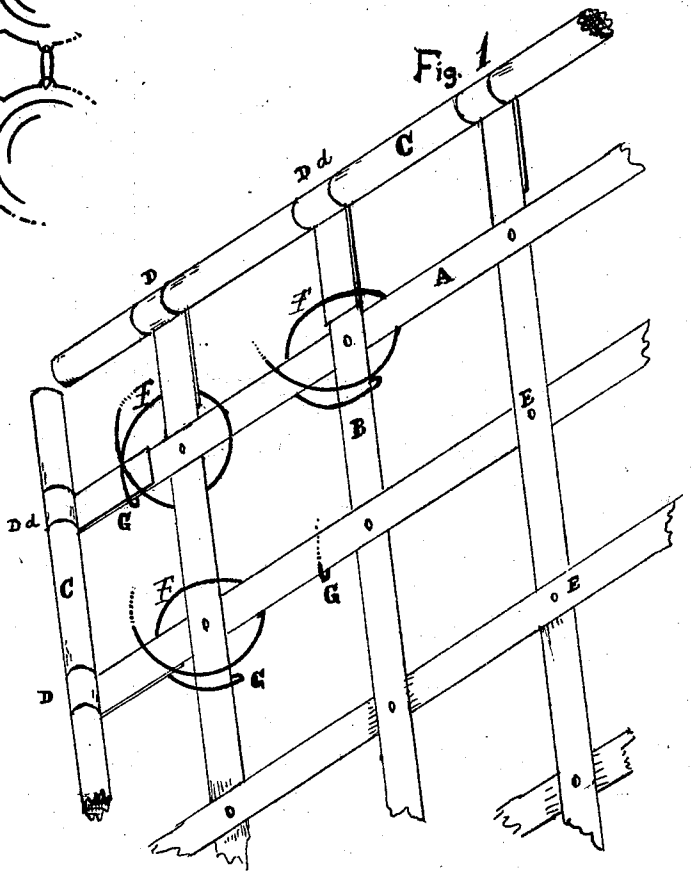


Fig. 2.

Scale of Fig. 1.
3 3/10 inches to 1 foot

Fig. 1



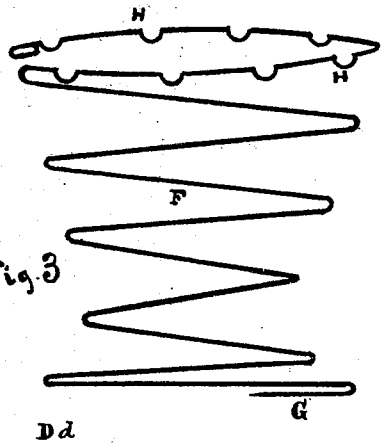


Fig. 3

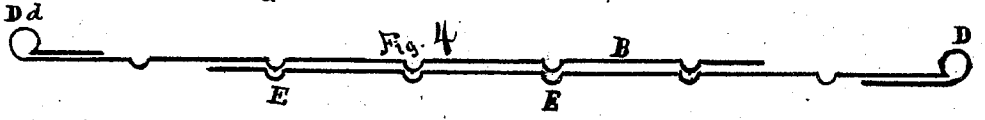


Fig. 4

Witnesses:
Alfred Baldwin
William P. Davis

Inventor:
Hanson Hard

UNITED STATES PATENT OFFICE.

HANSON HARD, OF AKRON, OHIO.

IMPROVEMENT IN SPRING BED-BOTTOMS.

Specification forming part of Letters Patent No. 121,169, dated November 21, 1871.

To all whom it may concern:

Be it known that I, HANSON HARD, of Akron, in the county of Summit and State of Ohio, have invented certain Improvements in Spring Bed-Bottoms; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to the use of a large number of springs proportionally light, connected together at their upper and larger ends, in combination with and attached at their lower and small ends to a metallic base or foundation or frame as a means to keep them in position, the whole resting upon the bed-slats; the object sought being an adjustable bed-bottom with a soft yielding surface, and yet with combined strength sufficient to effectually support the weight of any person reclining upon them. The bed-bottom is made adjustable to three different widths for double bedsteads—the first or narrower being four feet wide, containing one hundred and fifty springs; the second, one hundred and sixty-five; and the third one hundred and eighty; the first containing ten rows of springs, the second eleven, and the third twelve—with fifteen springs in a row—and by the same plan is adjustable to single bedsteads.

Figure 1 is a sectional view of the surface of the frame. Fig. 2 is a sectional view of the surface of the springs. Fig. 3 is a side view of one of the springs. Fig. 4 is a longitudinal sectional view through the middle of a transverse bar of the frame.

For a foundation or frame, longitudinal and transverse metallic bars or strips (the transverse bars in two pieces each) A B, woven together to prevent curving, in number sufficient to give an intersection for each spring. This frame is rendered more stable by rods C on each side, passing through and held by loops D D *d*, made by bending the ends of the bars alternately over and under the rods, said loops being kept in place by the springs. Dowels and corresponding countersinks E at the intersection of the bars fit into each other, and with the springs keep the bars in place. The transverse bars B, Fig. 4, each are made of two pieces, overlapping. The moving of these pieces upon themselves adjusts the bed-bottom to bedsteads of different widths. The spring F, which is a half or single cone, is attached by weaving the extremity of the wire of the small end into the bars at their intersection, (see Fig. 1,) and confining it with a hook, G, over the edge of the upper bar. The hook G is made by turning the end of the wire outward or downward away from the spring. The springs F, Fig. 2, at their upper and large ends, are connected together by links I, or otherwise, to keep the bedding from crowding down between them. The springs are corrugated or indented, H, Fig. 3, on their upper surface, to allow the links or connections to drop sufficiently to preserve an even surface, to lessen the wear of bedding.

Metallic bars have been used before in bed-bottoms for supporting springs, but not woven, and in two pieces. Hooks for fastening the springs, turned inward toward the spring, have been used before, but none made or used in the same manner as mine.

Half or single cone-springs are not new. I make no claim for them; but

I claim as my invention—

1. The bars B, Fig. 4, made each of two pieces, overlapping, with their dowels and corresponding countersinks E, substantially as and for the purpose hereinbefore expressed.

2. The combination of the bars A and B, the rods C, loops D D *d*, the dowels and corresponding countersinks E, springs F in number and arrangement, and hooks G, substantially as and for the purpose as before represented and set forth.

3. The combination of the bars A and B, the rods C, loops D D *d*, and dowels and corresponding countersinks E, springs F in number and arrangement, hooks G, links I with or without the indentations H, substantially as and for the purpose heretofore described.

HANSON HARD.

Witnesses:

ALFRED BALDWIN,

WILLIAM P. DAVIS.

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