

H. OGBORN & A. W. KENDRICK.

Springs for Bed-Bottoms.

No. 136,665.

Patented March 11, 1873.

Fig. 1.

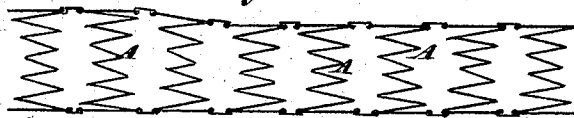


Fig. 2.

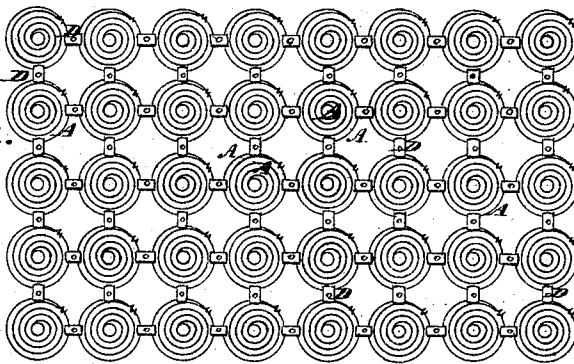


Fig. 4.

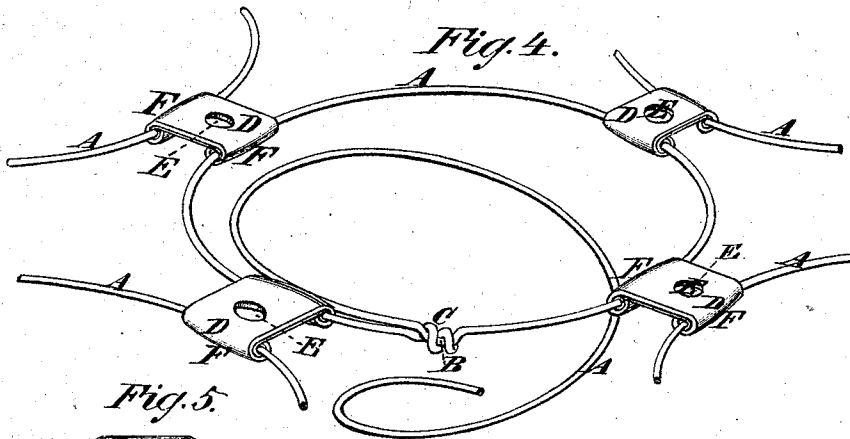


Fig. 5.

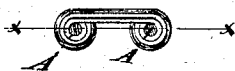


Fig. 6.

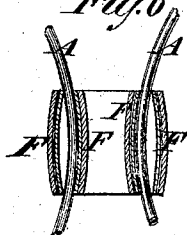


Fig. 7.



WITNESSES.

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HARRISON OGBORN, OF RICHMOND, INDIANA, AND ANDREW W. KENDRICK, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN SPRINGS FOR BED-BOTTOMS.

Specification forming part of Letters Patent No. 136,665, dated March 11, 1873.

To all whom it may concern:

Be it known that we, HARRISON OGBORN, of Richmond, Indiana, and ANDREW W. KENDRICK, of Brooklyn and State of New York, have invented new and useful Improvements in Metallic Springs for Mattresses and Bolsters Combined, and in devices for clasp- ing or attaching them together, whereby a light, elastic spring-mattress is produced; and we do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing making a part of this specification.

Figure 1 is a side elevation of our spring-mattress. Fig. 2 is a plan view of the same. Fig. 4 is a view of detached portions of several springs, and the clasps for holding them together. Fig. 5 is a cross-sectional view of the clasp and spring. Fig. 6 is a view of portions of the spring and the under side of the clasp, with part of the clasp broken away. Fig. 7 is a top view of our clasp.

The object of our invention is to construct a spring-mattress, or mattress and bolster combined, of a very superior quality; and it consists in making a short bend or indentation downward in the outer coils of the spring, where the ends of the wire are wrapped around it, of sufficient width and depth to receive the same, to prevent the ends from slipping and destroying the mattress, and to bring the wrap to a level with the surface of the outer coil of the spring, as shown at letter B, Fig. 4, thus giving a smooth surface to the mattress which will neither cut nor tear the bedding; and also to provide a loop or clasp that shall firmly unite the springs together at any required distance, and prevent the slippage of the springs in the loops without the use of shoulders, loops, hooks, eyes, or any deviation from the usual circular form of springs, and at the same time allow the springs to turn easily and with equal facility in the clasps in all positions, so as to form a soft, elastic, light, and noiseless mattress, or mattress and bolster combined, that may be used either side up, rolled together, or bent in any desired form or shape, which would not be possible if the clasp was straight, square, or flat.

A represents the springs of which our combined mattress and bolster are composed. B is

the part where the end is fastened to the outer coil. C, the indentation in the last or outer coils of the spring, where the ends are fastened. D is the clasp by which the springs are attached together. E is a lining for the same, and may be made of leather or other suitable material. F is a perforation in the center of the clasp, whereby it is lightened, and its appearance improved; yet this perforation is not essential, and may be omitted.

This improvement relates to what is known as upholster or spiral springs, of which mattresses, cushions, seats, &c., are composed, and in devices for attaching them together. Heretofore great difficulty has been found in providing fastenings that would clasp and hold the springs without slipping, and at the same time leave the mattress soft and flexible. When the clasps are made straight across at the ends, and flat on the sides, the springs—especially if they are small, such as we generally use—have a radius so small that if the clasp fits the coil in one position it cannot in any other, but, on the contrary, comes on a strain which must force the clasp open and loosen the coil, or bend the wire so as to partly destroy the flexibility of the mattress. When either the clasps or the ends of the wire become loose and slip, the mattress soon gets noisy and worthless.

In the construction of our mattress, we provide a clasp or clamp of any suitable metal, capable of being bent in the form required, as shown at D. This clasp is made of sufficient width to allow its edges to bear firmly on the wire at both sides, no particular width being required, except that a very narrow clasp would not sufficiently brace the springs. The ends of the clasp being closed down on the springs, the convex back of the spring will be set against the further side of the clasp, as shown in Fig. 6. This clasp is constructed with slightly rounded ends, and with a bulged or rounded surface near the ends on the outer side, so that when the ends are forced down over the coil, oval-shaped tubes are formed, as shown in Figs. 4, 5, and 6, the ends of which clasp and firmly hold the wire from slipping, and at the same time allow the portion of the spring within the tube to turn freely, thus

forming a soft, yielding surface to the mattress, which readily adapts itself to the shape of the body.

To form a combined mattress and bolster, one or more rows of springs at one end the mattress are made sufficiently long to form a bolster to elevate the head to the required height. To make a plain mattress the longer springs are left out, and springs of uniform length used. Across the middle or central half of our mattress, springs heavier than those at either end thereof should be used.

Having thus fully described our invention, what we claim therein as new, and desire to secure by Letters Patent, is—

1. A metallic spiral spring, constructed with an indentation in one or both of its outer

coils to receive the wrapped ends thereof, as described.

2. A connecting-clasp D, bent so to form an oval tube at each side thereof, for the purposes and uses, and in the manner described.

3. A mattress constructed of the springs A and clasps D, in the manner described, with a head or bolster elevation formed by graduating the length of the springs.

4. The springs A, constructed as described, in combination with the clasp D, when made and used in the manner and for the purposes set forth.

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ANDREW W. KENDRICK.

Witnesses:

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JOHN E. BOTSFORD.