(No Model.)

M. C. SILVER.

SPRING BED BOTTOM.

No. 257,619. Patented May 9, 1882.

Fig. 1.

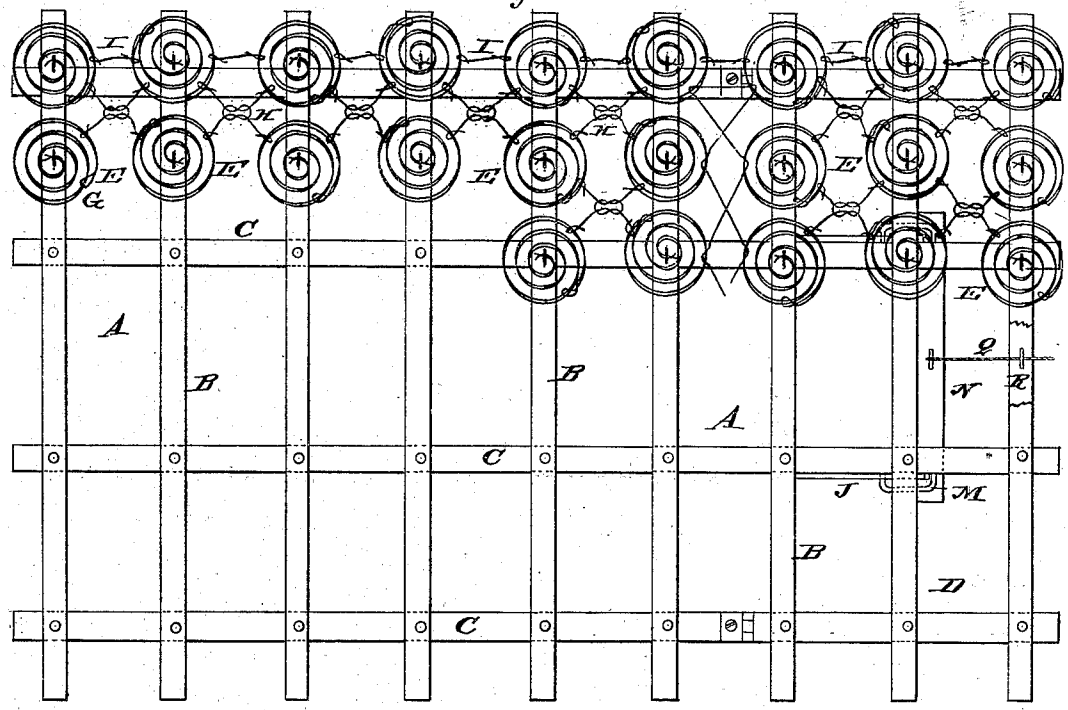


Fig. 3

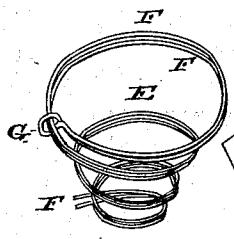


Fig. 5.

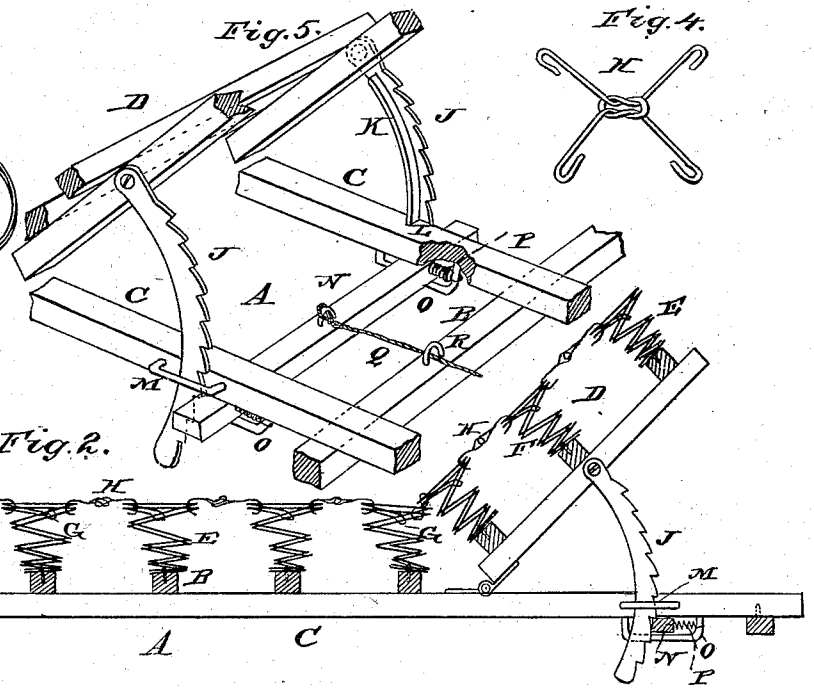


Fig. 4.

Fig. 2.

WITNESSES:

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MARVIN C. SILVER, OF MONROE, WISCONSIN.

SPRING BED-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 257,619, dated May 9, 1882.

Application filed March 30, 1882. (No model.)

To all whom it may concern:

Be it known that I, MARVIN C. SILVER, of Monroe, in the county of Green and State of Wisconsin, have invented certain new and useful Improvements in Spring Bed-Bottoms; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a plan view of my improved bed-bottom. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a detail view, showing in perspective the construction of one of the springs. Fig. 4 is a perspective view of one of the joints or ties by which the springs are connected; and Fig. 5 is a detail view, in perspective, of the adjustable head end of the bed.

Corresponding parts in the several figures are denoted by like letters of reference.

This invention relates to spring bed-bottoms; and it consists in certain improvements in the construction of the same, which will be hereinafter fully described, and particularly pointed out in the claims.

The frame A of my improved bed-bottom is composed of transverse slats B B, connected by longitudinal slats C C. To the outer ones of said slats C, near the head end of the bed, is hinged a suitably-constructed frame, D, which is adjustable, as will be hereinafter described, and which forms the head end of the bed-bottom.

E E are the springs, one of which is shown in detail in Fig. 3 of the drawings. Said springs are composed each of a double wire, F F, the two strands or wires being coiled together, as shown, so as to form a suitable coiled spring. By this construction I am enabled to use much lighter wire and obtain a far more flexible and elastic spring than when a single wire is employed. By bending or doubling the wire prior to coiling the same a loop, G, is formed at the upper end, through which the first coil passes, it being in this manner secured without any additional fastening. The springs E are secured upon the slats B of the bed-bottom by means of staples or in any suitable manner, and their upper ends are connected by means of the joints or ties H, one of which is shown in detail in Fig. 4 of the drawings. Said tie or connection is formed of two pieces of wire, which are bent or doubled and interlooped by placing the loop of one wire over the ends of the other, and then passing the ends of the first wire under the ends and up through the loop of the second, thus connecting the two and leaving the ends projecting in four directions. Said ends are then bent or hooked and adjusted over the top coils of four adjoining springs, which are thus firmly connected and prevented from swaying or sagging. This connection has the advantage of being very strong, and at the same time exceedingly light and flexible. All of the springs forming the bed-bottom are connected in this manner except the outer ones, which are connected by short hooked rods I.

Pivoted to the under side of frame D are two curved or segmental ratchet-bars, J J, provided on their inner sides with flanges K, accommodated in recesses L in the central longitudinal frame-bars, C.

M M are staples, which serve to hold said ratchet-bars in place, the flanges K serving in turn to prevent the ratchets from catching in the staples M.

N is a transverse bar, sliding longitudinally in staples O on the under side of bars C, and forced in a direction toward the end of the bed by suitably-arranged coiled springs P, so as to engage the ratchet-bars J. Bar N may be manipulated by a cord, Q, tied to it, and passing through suitably-arranged guide staples or eyes R.

The frame D, it will be observed, may be raised to an inclined position at any desired angle to the frame A, and is retained in such position by the ratchet-bars J engaging bar N. By drawing the latter back against the tension of the springs P the ratchet-bars J are released and frame D permitted to drop to a horizontal position. This device renders my improved bed-bottom exceedingly serviceable for the use of invalids, for whom it is difficult to sit up in bed.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The herein-described improved bed-spring, formed by coiling a doubled wire, the

first or upper coil being passed through and secured by the loop formed by doubling the wire, as set forth.

2. In a bed-bottom, the combination, with the springs, of the joint or tie, formed by interlooping two pieces of wire which have been bent or doubled, as herein described, for the purpose set forth.

3. As an improvement in bed-bottoms, the combination of the frame A, having rails C, provided with recesses L and staples M, the hinged frame D, having flanged ratchet-bars J, the bar N, springs P, and the bed-springs secured upon said frames, as described, for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

MARVIN C. SILVER.

Witnesses:

TRUEMAN O. SILVER,

ANDREW S. DOUGLAS.