

(No Model.)

F. SPOEHR.
SPRING BED BOTTOM.

No. 276,918.

Patented May 1, 1883.

Fig. 1.

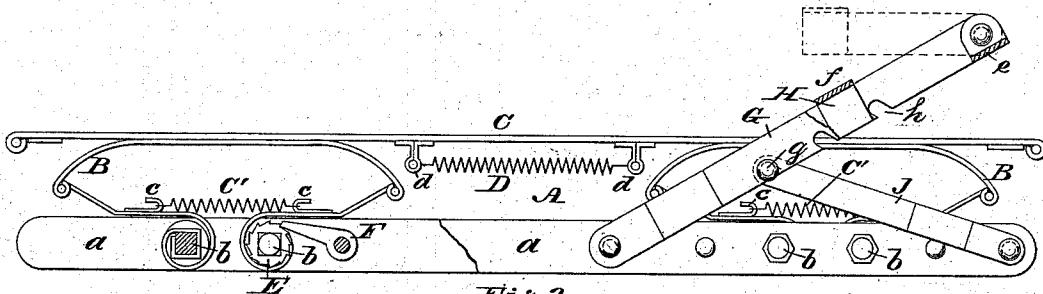


Fig. 2.

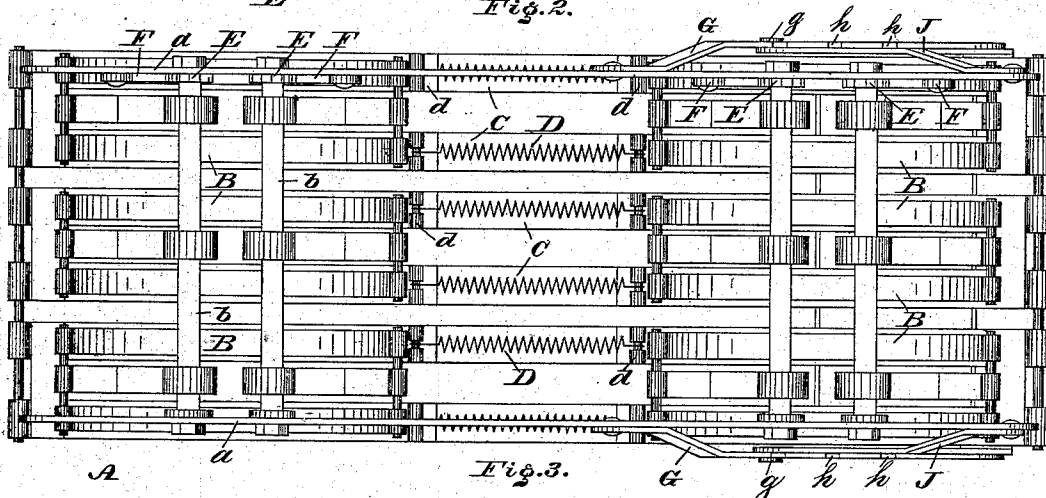
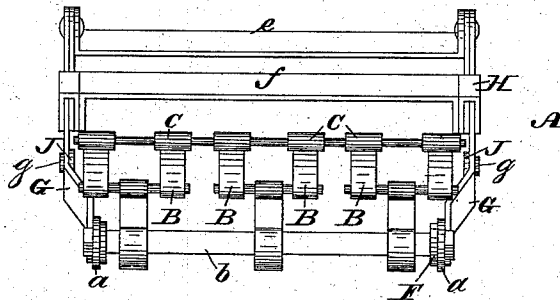


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

FRITZ SPOEHR, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO KASPAR WEBER, OF SAME PLACE.

SPRING BED-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 276,918, dated May 1, 1883.

Application filed March 26, 1883. (No model.)

To all whom it may concern:

Be it known that I, FRITZ SPOEHR, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Spring Bed-Bottoms, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a side elevation of a spring bed-bottom embodying my invention. Fig. 2 is a bottom plan thereof. Fig. 3 is an end view thereof.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists of a spring bed-bottom having elliptical springs connected with the slats and coiled springs connected with the elliptical springs, whereby there is increased resiliency of the slats and uniformity without abruptness in the motions of the slats.

It also consists of means for adjusting the tension of the springs.

It also consists of springs attached to the under side of the slats, at the middle thereof, for preventing improper yielding of the slats thereat.

It also consists of a head-rest adapted for sustaining the head of the mattress in elevated positions.

Referring to the drawings, A represents the frame of the bed-bottom, consisting of the side pieces, *a*, and transverse pieces *b*, the latter being journaled to said side pieces, *a*, so as to be capable of rotation thereon.

B represents elliptical springs whose upper leaves are secured to the slats C of the bed-bottom and the lower leaves to the cross-pieces *b*, the ends of the lower leaves being wound around said cross-pieces in reverse order.

The upper sides of the lower leaves of each spring are provided with hooks or eyes *c* for the connection of a longitudinally-extending coiled spring, *C'*, whereby increased spring-power is obtained; and to the under side of each slat, at the center thereof, where the slats are disposed to yield or bend to the greatest extent, I secure hooks or eyes, or proper pieces, *d*, which depend therefrom from opposite sides

of the center, for the connection of a longitudinally-extending coiled spring, D, whereby the slats are caused to yield or bend uniformly throughout their lengths.

To each cross-piece *b* is secured a ratchet, E, and on each side piece, *a*, is hung a pawl, F, which engages with said ratchet, and the cross-piece is partly or entirely squared for the engagement of a wrench or other proper implement, whereby the lower leaves of the springs may be wound or unwound, thus increasing or decreasing the tension of said springs, and consequently adjusting the elasticity of the slats, the ratchets and pawls serving to hold or lock the rotatable pieces *b*.

If desired, the slats may be made of metal, as are also the other parts described, whereby a light, strong, and durable bed-bottom is produced, there being no concealed parts in which vermin may lodge.

To the side pieces, *a*, are pivoted arms G, which are connected at top by a cross-bar, *e*, forming a head-rest, and to the upper part of said arms is pivoted a frame, H, the cross-bar *f* of which occupies a position on the arms G opposite to the bar *e*, the frame abutting against the arms G, so as to limit its downward motion.

To the side pieces, *a*, are also pivoted props J, the upper ends of which have pins or studs *g* for engagement with notches *h* in the arms G. By this provision the head-rest may be raised and lowered and retained in its adjusted position.

The props J may be entirely cleared of the arms G and laid on the slats or mattress thereon, and when the mattress is to be raised with the head-rest the frame H is thrown up and the upper end of the mattress placed on the bar *e*. The frame H is then returned over the mattress, the cross-bar *f* resting on the upper side thereof, so that the top or head of the mattress is clamped between the two bars *e f*, and the bar *e* forms somewhat of a support for the back or neck of the occupant of the bed-bottom, thus preventing the bulging downward of the mattress below said bar *e*.

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

1. The slats, in combination with elliptical springs secured to said slats and coiled springs secured to said elliptical springs, substantially as and for the purpose set forth.
- 5 2. The slats with depending pieces on opposite sides of the center, in combination with springs secured to said pieces, substantially as and for the purpose set forth.
- 10 3. In a spring bed-bottom, springs having their lower leaves wound around rotatable pieces, whereby the tension of the springs may be adjusted, said pieces having locking devices, substantially as and for the purpose set forth.
4. The frame A, with rotatable cross-pieces, the ratchets and pawls, the springs and slats, combined and operating substantially as and for the purpose set forth.
- 15 5. The bed-bottom frame provided with the head-rest, in combination with a swinging frame, H, connected with said rest, and having a cross-piece which is on opposite side of the cross-piece of the rest, substantially as and for the purpose set forth.
- 20

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Witnesses:

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