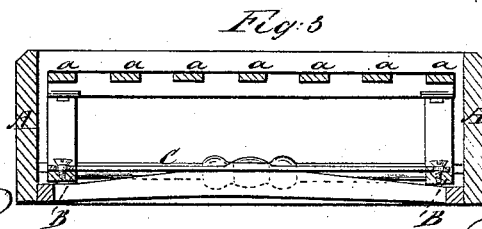
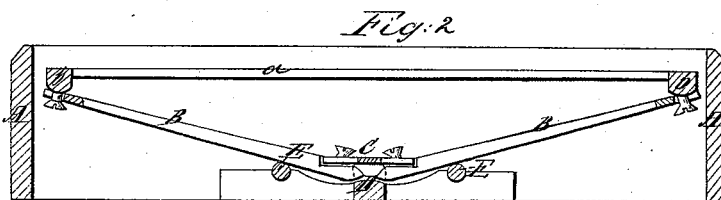
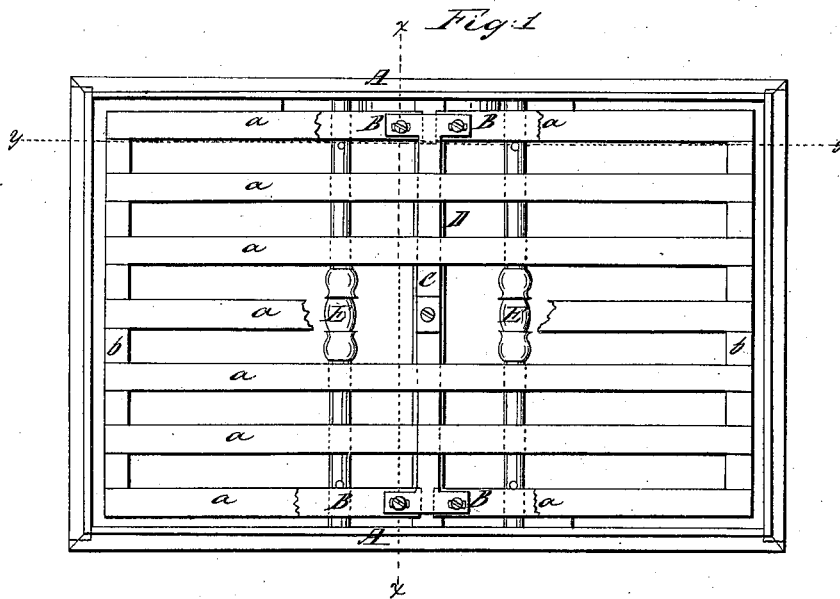


S. W. Beach,

Bed Bottom,

N^o 54,281.

Patented May 1. 1866.



Witnesses
M. R. Worthington
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UNITED STATES PATENT OFFICE.

S. W. BEACH, OF NILES, MICHIGAN.

IMPROVED BED-BOTTOM.

Specification forming part of Letters Patent No. 54,281, dated May 1, 1866.

To all whom it may concern:

Be it known that I, S. W. BEACH, of Niles, in the county of Berrien and State of Michigan, have invented an Improved Spring Bed-Bottom; 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 drawings, forming a part of this specification, in which—

Figure 1 is a plan or top view of my invention. Fig. 2 is a longitudinal vertical section taken on the plane of the line *xx*, Fig. 1. Fig. 3 is a transverse vertical section taken on the plane of the line *yy*, Fig. 1.

Similar letters of reference indicate like parts.

My invention consists in mounting the bed-bottom on levers whose lower ends are operated upon by a spring arranged transversely across the bedstead, all the parts being so constructed and arranged that the bed-bottom will have the desired rising-and-falling motion, as will be presently described.

This spring bed-bottom can be applied to either old bedsteads—that is, those now in use—or to new ones. I have illustrated it as arranged and adapted for the former, wherein a frame, *A*, is employed which is to be placed so as to be properly supported by the side and end rails of any bedstead now in use. When applied to new bedsteads this frame can be dispensed with and the bed-bottom be fastened directly within the side and end rails of the bedstead, which will serve the purpose of the frame *A*.

The bed-bottom consists of the desired number of slats *a*, resting at the ends upon cross-pieces *b*, so as to constitute a frame, as it were, on which to rest the bedding. To each corner of the cross-piece *b* there are loosely pivoted or hinged one end, respectively, of four levers, *B*, the position of said levers relatively to the

slats of the bed-bottom being at an angle of about thirty degrees. Upon the lower end of these levers *B* a metallic spring, *C*, is secured by bolting it at each side to the respective levers, as shown clearly in Figs. 1 and 2. This spring is arranged transversely across the bedstead, and should be near the center longitudinally of the bedstead.

D is a cross-piece, extending from side to side of the frame *A*, or of the bedstead if the frame be dispensed with and *E E* are two cross-rods, also extending across the frame *A*. The cross-beam *D* is arranged directly under the spring *C*, and to it the said spring is bolted at about its center, thus throwing the effective parts of the spring at each end thereof. The levers *B*, near their lower ends, rest upon the cross-rods *E E*, which constitute their fulcrum-points, leaving the longer ends of the arms of the levers above the fulcrum-points.

From the above description it will be seen that on depressing the bed-bottom *a b* the lower ends of the levers *B* will be caused to rise, and thus the spring *C* will be brought into effective operation, as can be readily understood.

This invention produces a light, easy, and durable bed-bottom, and one that can be applied with but comparatively little expense to either an old or new bedstead.

What I claim as new, and desire to secure by Letters Patent, is—

1. The levers *B B*, in combination with the bed-bottom *a b* and spring *C*, substantially as specified.

2. So mounting a bed-bottom that the same will receive its necessary springing motion from a single spring, *C*, arranged so as to operate substantially as specified.

S. W. BEACH.

Witnesses:

S. M. FINLEY,
T. M. FINLEY.