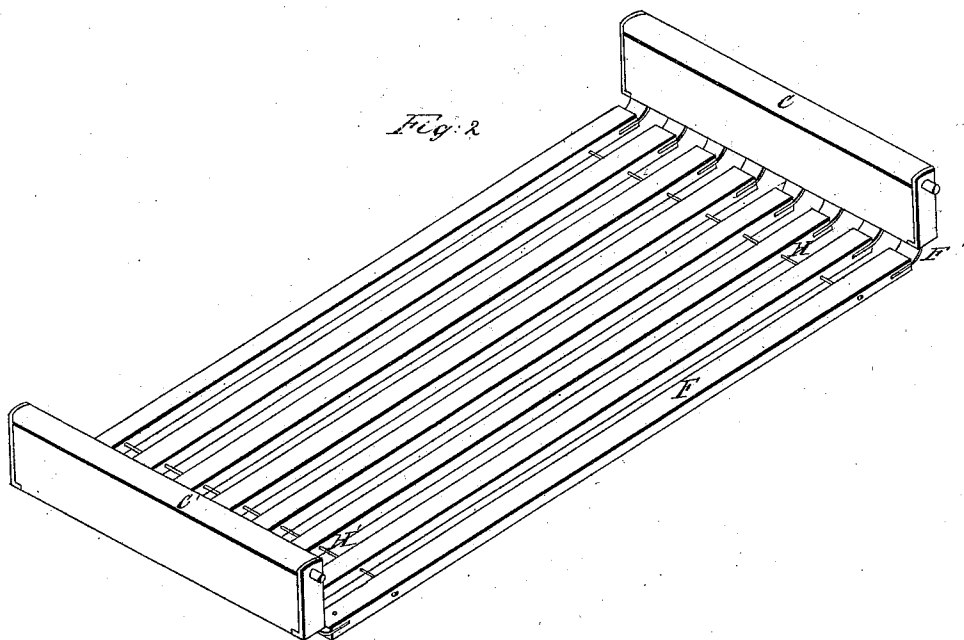
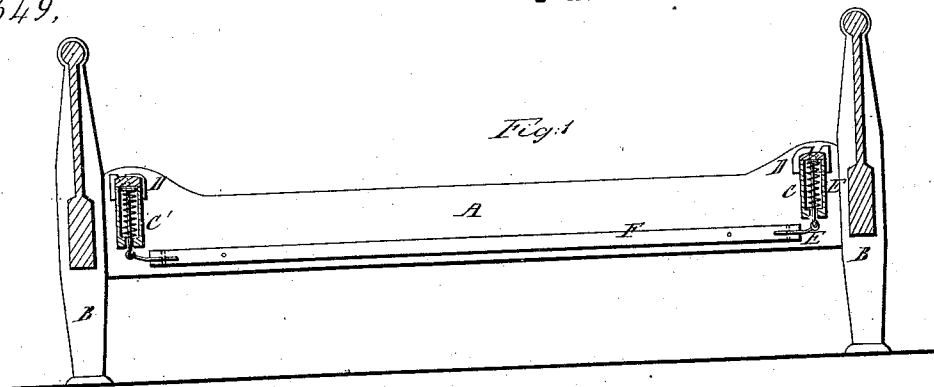


N. M. Phillips,
Bed Bottom,

Patented Mar. 16, 1858.

No. 19,649.



UNITED STATES PATENT OFFICE.

NATHAN M. PHILLIPS, OF NEW YORK, N. Y.

SPRING-BEDSTEAD.

Specification of Letters Patent No. 19,649, dated March 16, 1858.

To all whom it may concern:

Be it known that I, NATHAN M. PHILLIPS, of the city, county, and State of New York, have invented certain new and useful Improvements in Spring-Bottoms for Bedsteads, whereby their expense is materially lessened and their efficiency increased; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, in which—

Figure 1 is a vertical and longitudinal section, showing the attachment of the bottom to a bedstead, taken through a point near the center of the width of the bedstead, and through the center of one of the bottom bars and its connected springs, and Fig. 2 is an isometrical perspective view of the bottom detached.

A is one of the sides, and B, B' the head and foot of a couch bedstead of ordinary construction.

C, C' are cross bars in which the springs are placed, and which swing on pivots in their ends in the boxes or catches D secured at the head and foot of each side of the bedstead. This swinging or oscillatory motion of the cross bars not only renders the motion of the bottom easy to the change of position or movements of persons occupying the bed, but also allows for the shortening of the bottom bars in case they should settle in the center under the weight of the persons lying upon and over them.

E is a coiled spring, one of which is connected to each end of each of the bottom bars F by the flexible connection F'. They are formed of wire of such size and rigidity as to combine a proper degree of elasticity with requisite strength to support the weight brought to bear upon them, and are inserted in apertures made in the cross bars C, C', and confined in place by the caps of the cross bars being screwed or fastened down upon them. A rod or shaft is attached to, and runs up through the center of each spring, which has a button or cross piece upon its upper end which bears down upon the top of the spring and compresses it together when a weight or pressure is brought upon it, and which runs down through the bottom

of the cross bar and has its lower end formed into a hook to which the flexible connection F' is attached to connect the bottom bars to the springs.

F is one of the bottom bars, of which the number will vary with the width of the bedstead to which the bottom is to be applied. They are to be formed of wood which combines lightness with rigidity, so as to keep their weight as light as possible, and yet have sufficient rigidity to have the spring and elasticity of the bottom formed by the springs alone as far as practicable. They are connected together near their top and bottom ends by the cords H, H', for the purpose of transferring to its adjoining bars a portion of the weight or pressure that may happen to be placed upon one of the bars.

The advantages of my improvement are, that it can be manufactured and applied at less expense than any spring bed bottom now in use—that it can be attached to a bedstead in less time and with less preparation than any other, the only attachments or fixtures to be put upon the bedstead being the catches D, which are readily put in place—that it can be attached to, and detached from the bedstead with great facility, it being all connected together in use, and the cross bars C, C' having only to be put in, or lifted out of the catches D to put in or take it out—that it can be packed very compactly for transportation, as the bottom bars can be detached from the springs, and they and the cross bars packed safely together in a small compass—that it meets and answers all the requirements of a perfect bed bottom by its being perfectly elastic, while it is not liable to sag or settle unpleasantly or inconveniently when the weight or pressure is applied to it at a particular or limited point.

What I claim as my invention and desire to secure by Letters Patent is—

The combination of the cross bars C, C' and the spiral springs E with the bottom bars F, and flexible connections F', connected arranged and operated as, and for the purposes set forth.

NATHAN M. PHILLIPS.

Witnesses:

FRANCIS S. LOW,
M. HASKELL.