

B. H. OTIS.
Spring Bed-Bottoms.

No. 149,149.

Patented March 31, 1874.

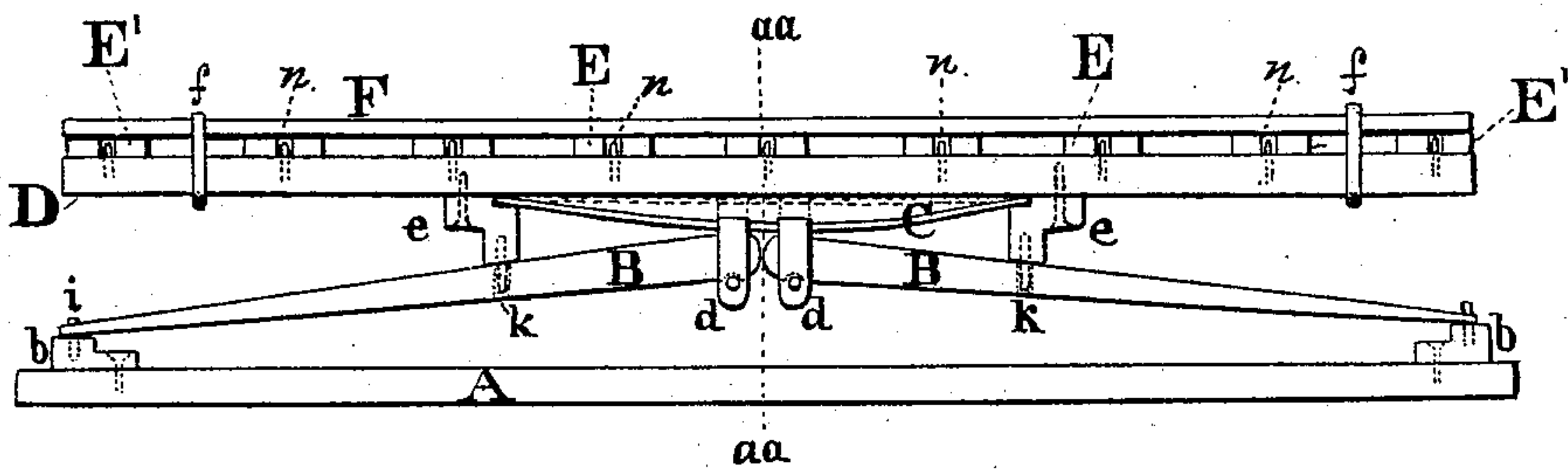


Fig. 1.

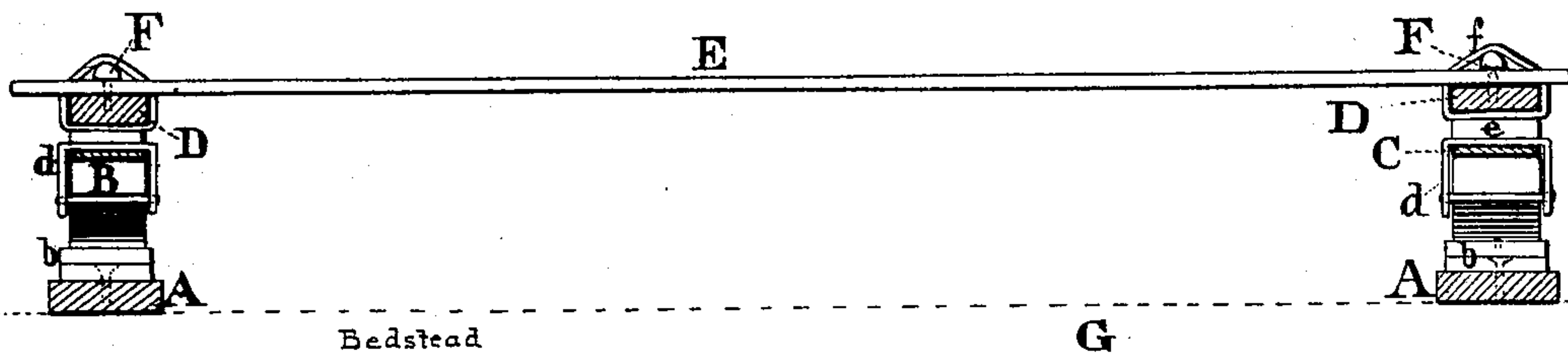


Fig. 2.



Fig. 3.



Fig. 5.

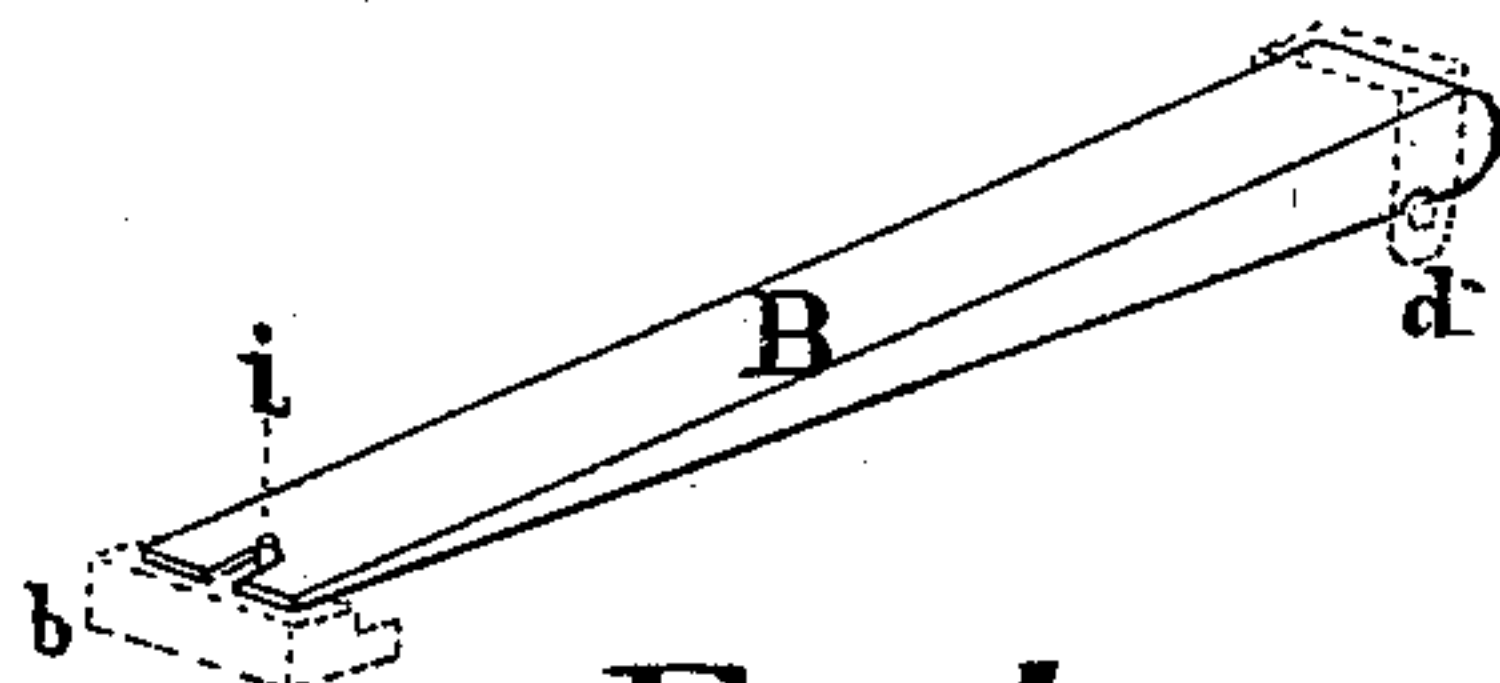


Fig. 4.

Witnesses
James Moore.
Henry W. Wells.

Benjamin H. Otis
by Edmund Thurston
his atty. in fact

UNITED STATES PATENT OFFICE.

BENJAMIN H. OTIS, OF HAVANA, ILLINOIS.

IMPROVEMENT IN SPRING BED-BOTTOMS.

Specification forming part of Letters Patent No. **149,149**, dated March 31, 1874; application filed July 30, 1873.

To all whom it may concern:

Be it known that I, BENJAMIN H. OTIS, of Havana, in the county of Mason, and in the State of Illinois, have invented an Improvement in Spring Bed-Bottoms granted to me by Letters Patent of the United States, January 9, 1872, No. 122,645; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawings making a part of this specification, in which like letters of reference refer to like parts, and in which—

Figure 1 represents an end elevation; Fig. 2, a longitudinal elevation along dotted line *a' a'*, Fig. 1; Fig. 3, a perspective view of one of the slats *E E*, &c.; Fig. 4, perspective view of one of the inclined springs *B B*; Fig. 5, perspective view of one of the fulcrum-blocks *e e*.

This invention relates to a peculiar construction and combination of devices, as will be hereinafter more fully explained, and pointed out in the claim.

In the drawings, *A A* represent two movable cross-bars, (movable within the bedstead sides,) and having at each end a block, *b*, surmounted by a short pin, *i*, to receive the slot in one of the inclined springs *B B*. These latter are placed in pairs at either end of the bed-bottom, their upper ends having each a recess cut in the under surface to rest upon a horizontal pin engaged in the retaining loop or clip *d*. (I also use a single clip instead of two, to inclose the united heads of these springs *B B*, to connect them with the straight spring *C*.) Through the upper part of the loops *d d*, at each end of the bed-bottom, passes a straight spring, *C C*, the ends of which are secured in a recess in either of the blocks *e e*, between the bar *D* and spring *B*, or be secured by a pin and slot, bolt, or equivalent fastening. These springs *C C* may be placed with equal advantage within the clips *d d* and be-

low the levers *B B*. The bars *D D* each rest upon the fulcrum-blocks *e e* below them, and to which they are fastened; said blocks have also a short pin or nipple, *k k*, on their under surface to enter a hole in the respective springs *B B B B*. The bars *D D*, further, are provided with a row of vertical pins, *n*, on their upper surfaces, to hold the bed-slats. The latter, *E E*, &c., have corresponding holes *s* at one end, and slots *z* at the other to adapt them to the length of the bed-bottom or distance between the bars *D D*. The outer bed-slats *E' E'*, one at each side, have no slots, but have a row of holes at both ends in order to tie the bars *D D* and prevent the bed-bottom from "spreading." These slats are all kept down by a transverse rod of wood or iron, *F F*, at either end of the slats *E E*, &c., confined to the same by a rubber band, *f f*, or similar device, which passes round each end of a rod, *F*, and bar *D*. The spring *C* is shown curved because drawn down by the levers or springs *B B*.

The operation of this improvement is as follows: The weight being applied upon the slats *E E*, &c., the pressure is divided by the blocks *e e* between the bars *D D* and the supporting-levers or springs *B B B B* and the steel springs *C C*.

What I claim as my invention is—

The slats *E* provided with the elongated slots *z* and holes *s*, in combination with the rod *F*, rubber band *f*, and bars *D* provided with pins *n*, substantially as and for the purpose set forth.

In testimony that I claim the foregoing improvement in spring bed-bottoms I have hereunto set my hand this 21st day of July A. D. 1873.

BENJAMIN H. OTIS.

Witnesses:

H. W. WELLS,
JAMES M. MORSE.