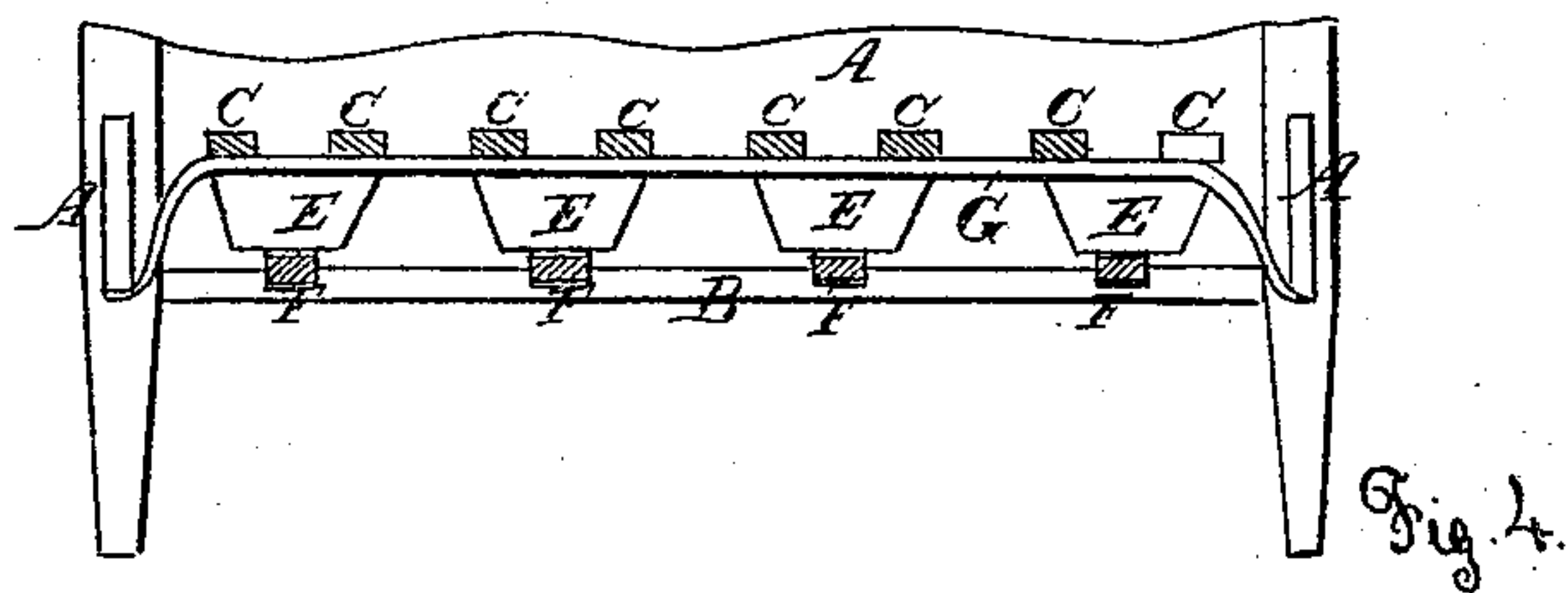
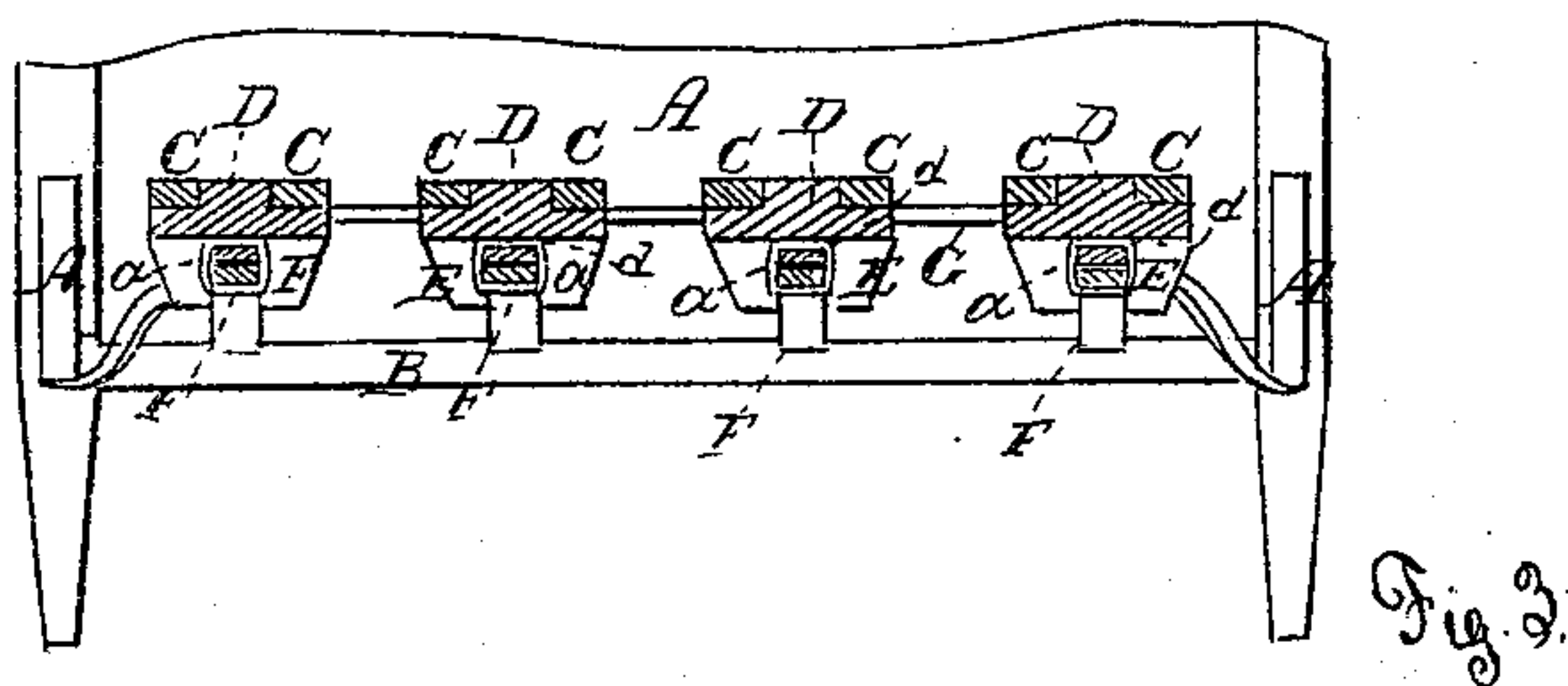
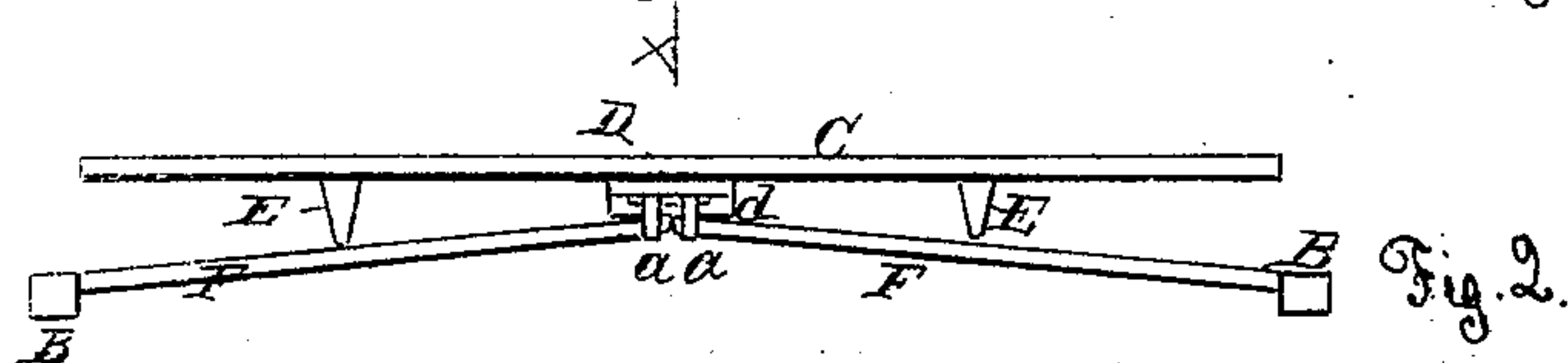


G. W. Morrill,

Bed-Bottom.

Nº 92,740.

Patented Jul. 20. 1869.



WITNESSES:
L. Coburn
H. Bruns

INVENTOR:
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United States Patent Office.

GEORGE W. MORRILL, OF STERLING, ILLINOIS.

Letters Patent No. 92,740, dated July 20, 1869.

IMPROVED SPRING-BED BOTTOM.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, GEORGE W. MORRILL, of Sterling, in the county of Whitesides, and State of Illinois, have invented a new and useful Improvement in Spring-Bed Bottoms; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and the letters and figures marked thereon, which form part of this specification.

Elastic or spring-bed bottoms have been heretofore made and patented, consisting of a series of slats, each combined through the medium of bearing-blocks, fixed on the under side thereof, with two shorter slats or levers resting or supported, respectively, at one end, upon the bed-frame, (which thus becomes a stationary fulcrum therefor,) and at the other in elastic loops or rings, secured to the long slat, at or near its centre; and also of a slatted frame, supported in like manner, by means of blocks resting upon levers, suspended at one end in elastic loops secured to the frame, and at the other upon the bedstead-frame.

In the first instance, however, the independent arrangement of disconnected slats produces a loose, disjointed bottom, constantly liable to derangement and consequent inconvenience and damage, while in the latter, the bottom, consisting simply of a rigid slatted platform, stiff and unbending in itself, which, although supported upon springs, so as to yield vertically, cannot adapt itself to the form or position of the occupant of the bed, affords but little ease or comfort.

The object of my invention is to obviate the disadvantages attendant upon these forms of spring-bed bottoms by an improvement thereon.

This improvement consists in combining independent, elastically-supported slats in pairs, by means of central blocks D, (to which the supporting-springs of the short levers are attached,) and bearing-blocks E, placed between the spring-supports of the levers and their fulcrum on the bedstead-frame, and in uniting these pairs in a series, by means of transverse flexible bands G, extending from side to side of the bedstead-frame, and secured thereto, as well as to each pair of slats, so as to allow a limited independent vertical play of the double slats, and yet entirely prevent any lateral movement thereof, the whole constituting a complete, steady, secure, yet perfectly flexible and elastic bed-bottom.

To enable those skilled in the art to understand how to construct and use my said invention, I will proceed to describe the same with particularity, making reference, in so doing, to the aforesaid drawings, in which—

Figure 1 represents a plan or top view of my invention;

Figure 2 is a side view of the same;

Figure 3 is a central cross-section thereof, at the line *x*, in fig. 1; and

Figure 4 is a cross-section, taken at the line *y*, in fig. 1.

Similar letters of reference in the several figures denote the same parts of my invention.

A represents the bedstead, and

B B, two cross-pieces, or bars, secured, one to the foot and one to the head of the bed, as shown, to receive and support one end of the levers F F, as shown.

The upper slats, upon which the mattress rests, are marked C, and, as shown, are connected at the centre by blocks D, so as to be arranged in pairs or sections, as shown.

This arrangement of the upper slats C, in pairs or sections, however, is not essential, as each slat, C, may be separate, and operate wholly independent from the rest, if desired.

Beneath each slat, C, or pair or section of slats, are arranged two levers, F F, one end of each lever resting on the cross-bars B B, at the foot and head of the bed, and the other and contiguous ends of the levers being each separately supported in an elastic ring, or its equivalent, marked *a a*, as shown.

The said rings are secured to the blocks, which connect the pairs of slats C C, as shown, by passing around a bar, *d*, which is firmly secured upon the under side of said blocks D, or said rings may be secured to the middle of the slats C in any other suitable manner.

There are also secured to the slats C C, about midway from the middle to the ends, the blocks, or fulcrum, marked E, which rest upon the levers F F, as shown.

The slats, or pairs or sections of slats C C, are secured together by leather or other straps G G, which are buttoned upon suitable knobs, screw or nail-heads, on the fulcrum-blocks E, the ends of the straps being secured to the bed-raves, or sides of the bedstead, as shown.

Thus, when the pressure is brought upon the slats C, at the centre, both of the rings *a a* yield, and give the required elasticity, and pressure applied at each end causes the corresponding ring to yield, thus producing an easy and uniformly-yielding surface, for the mattress to rest upon.

When the slats C are arranged singly, each slat, C, would require a pair of levers, F F, and the rings *a a* could be secured in any suitable manner to said slats.

By making my bed-bottom in sections or pairs of slats, and connecting them only by straps, as described, each section of slats will operate independently, so far as the perpendicular motion is concerned, but the strap connecting them prevents an independent lateral motion of the slats.

I do not claim, broadly, supporting the slats of my improved bed-bottom upon short levers, combined therewith through the medium of stationary fulcrum and springs and intermediate bearing-blocks, this feature of my invention being anticipated in Letters Pat.

ent to Charles Weed, dated May 21, 1867; nor do I claim a rigid slatted frame, in combination with such elastically-yielding levers, as found in the patent of S. J. Wingate, dated January 7, 1868; but

I claim as an improvement on said inventions, and desire to secure by Letters Patent—

My improved elastic, flexible, and adjustable bed-bottom, composed of slats C C, united in pairs by central blocks D, carrying elastic loops or rings, to receive the movable ends of the short levers F, whose fulcrum-

ends rest upon the bedstead-frame, and by intermediate bearing-blocks E, bearing upon said levers, when these double slats are united in a series, by transverse flexible bands G, secured thereto and to the bedstead-frame, all substantially as herein set forth.

GEORGE W. MORRILL.

Witnesses:

O. C. D. RICE,
H. CRABTREE.