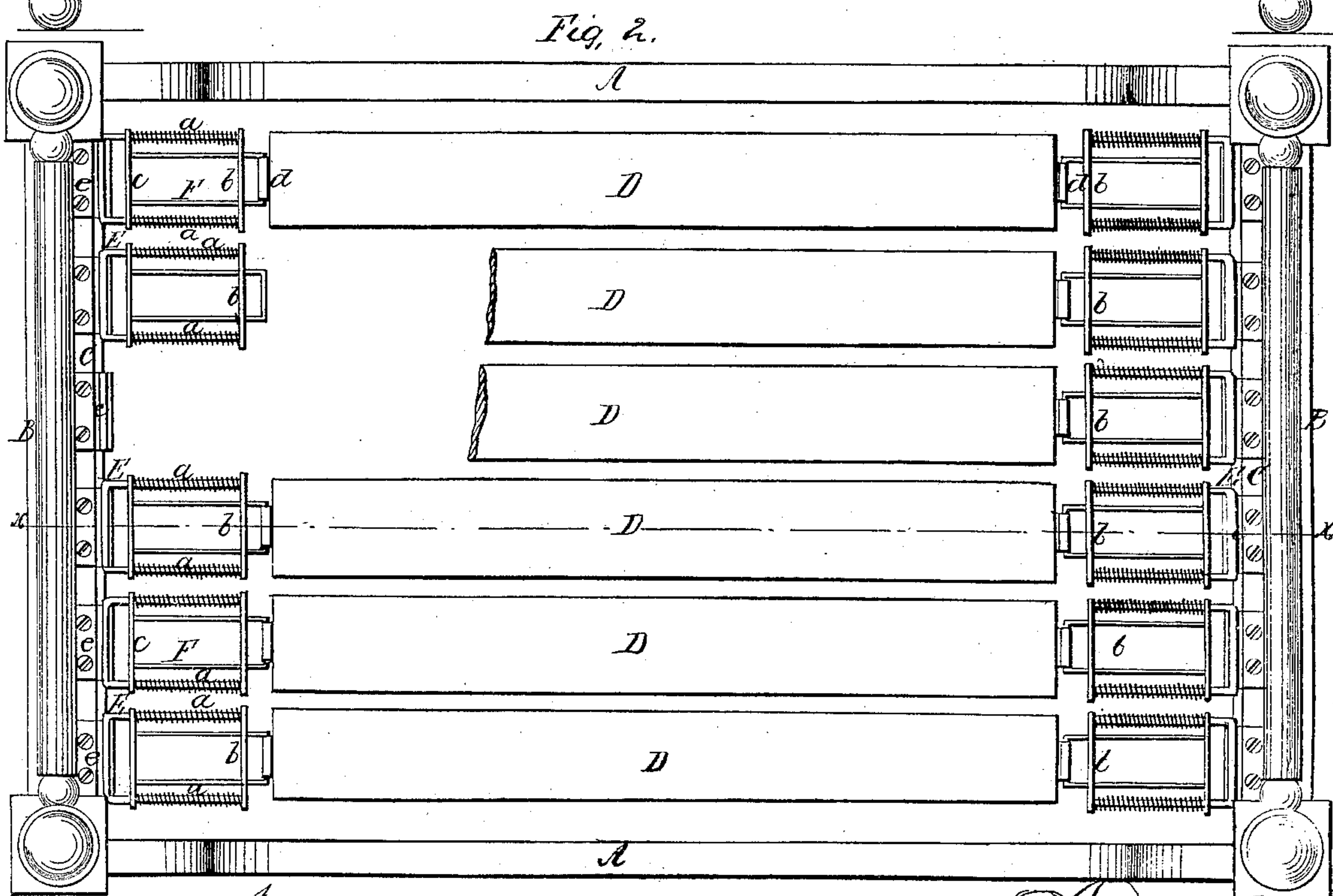
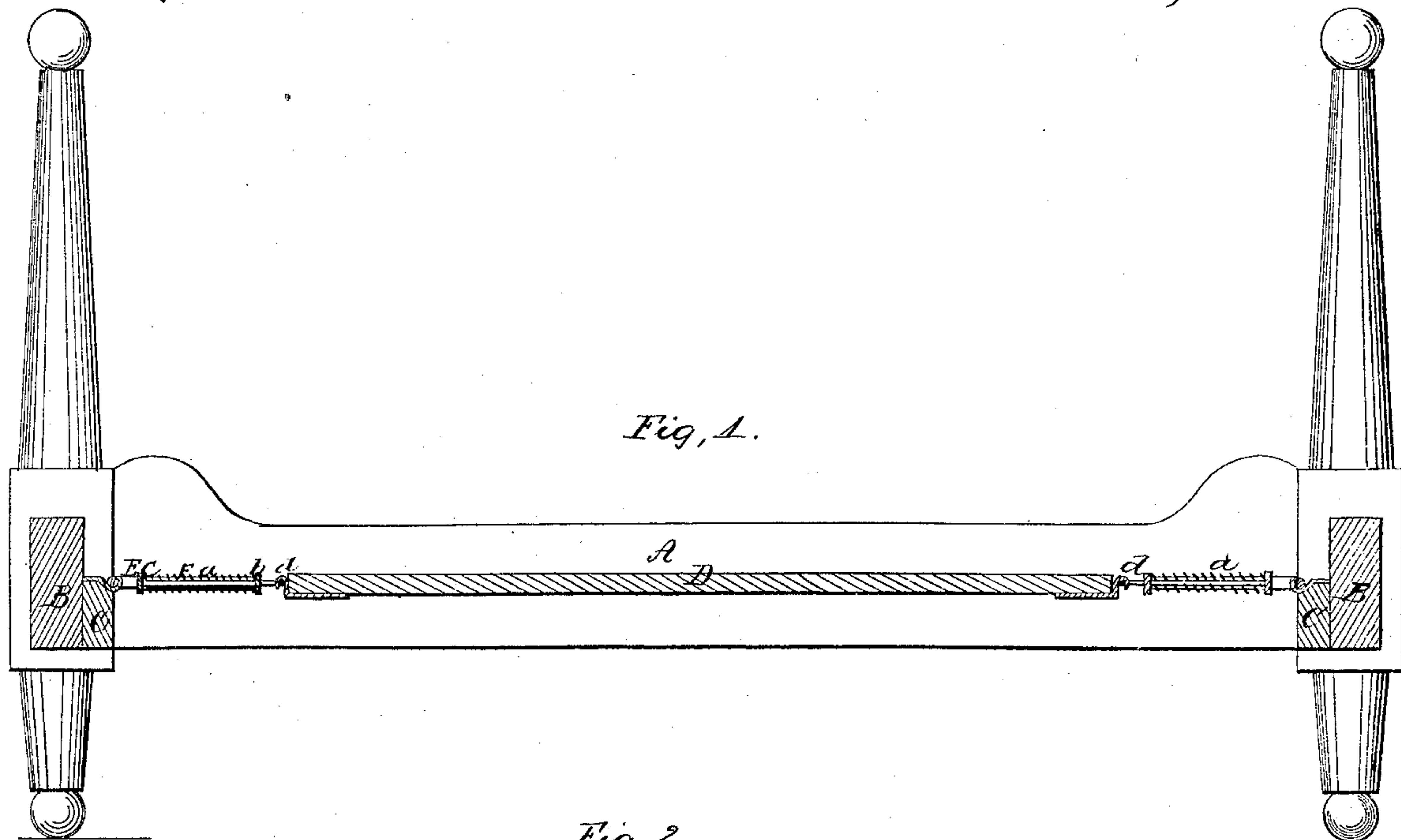


J. PUNCHES,

Bed Bottom.

N^o 59,649.

Patented Nov/3, 1866.



Wm. Jackson
John A. Service Witnesses.

John P. Punches
Per Myself
Stump

UNITED STATES PATENT OFFICE.

DANIEL PUNCHIES, OF PLYMOUTH, MICHIGAN.

IMPROVED BED-BOTTOM SPRING.

Specification forming part of Letters Patent No. 59,649, dated November 13, 1866.

To all whom it may concern:

Be it known that I, DANIEL PUNCHIES, of Plymouth, in the county of Wayne and State of Michigan, have invented a new and useful Improvement in Spring-Bedsteads; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a longitudinal vertical section of a bedstead with my invention applied to it, the section being taken in the line *x x*, Fig. 2. Fig. 2 is a plan or top view of the same.

My invention consists in a spring-frame, one end of which is attached to the end of the slat and the other to the end rail of the bedstead at both ends, the said spring-frame consisting in detail of a quadrilateral frame around each of whose side strips a spiral spring is coiled, and a sliding frame working within the quadrilateral frame, and operating in such a manner that on depressing the slats of the bedstead the spiral springs will be contracted and the slats receive the required springing motion, as will be hereinafter described.

A designates the longitudinal, and B the transverse, rails of the bedstead, and C cleats secured to the inner faces of the transverse rails, to enable my invention to be the more readily applied. D D are the slats of the bedstead, and their length is not sufficient to enable them to extend from end rail to end rail, there being room between the ends of the slat and the cleats C, to admit of my spring-frame being applied. E is a quadrilateral frame, two of the sides being greater than the other two. Around each longer side a spiral spring, *a*, is coiled, one of whose ends bears against a cross-

piece, *b*, which forms one side of the frame E, and the other against one side, *c*, of a sliding frame, F. This side *c* of the sliding frame is fitted to slide up and down on the longer sides of the quadrilateral frame, and it has attached to it (to form the frame) a rod, both of whose ends are run through perforations made in the side *b* of the frame E, as shown clearly in Fig. 2. I have provided each end of the rails with a hook, *d*, which is to be hooked into the sliding frame F, and at the proper places along the cleats C I have secured similar hooks *e*, which are to be hooked into the frame E.

By referring to Fig. 2, the arrangement of the bed-bottom will be clearly understood, and it will be seen that on depressing the slats the sliding frame F acts upon the springs coiled around the longer sides of the frame E, and thus the bed-bottom possesses an easy springy motion.

The spring-frame, as a whole, is simple and not likely to get out of order.

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

The combination of the frames E F with the springs *a a*, when said frames are constructed as herein described, and attached to the ends of the slats and end rails of the bedstead, so as to be free to move in the direction of the length of the slats under extension and contraction, as described, and for the purpose specified.

The above specification of my invention signed by me this 2d day of July, 1866.

DANIEL PUNCHIES.

Witnesses:

C. H. BENNETT,
J. T. JOHNSON.