A. C. MILLER.

SPRING BED BOTTOM.

No. 181,586. Patented Aug. 29, 1876.

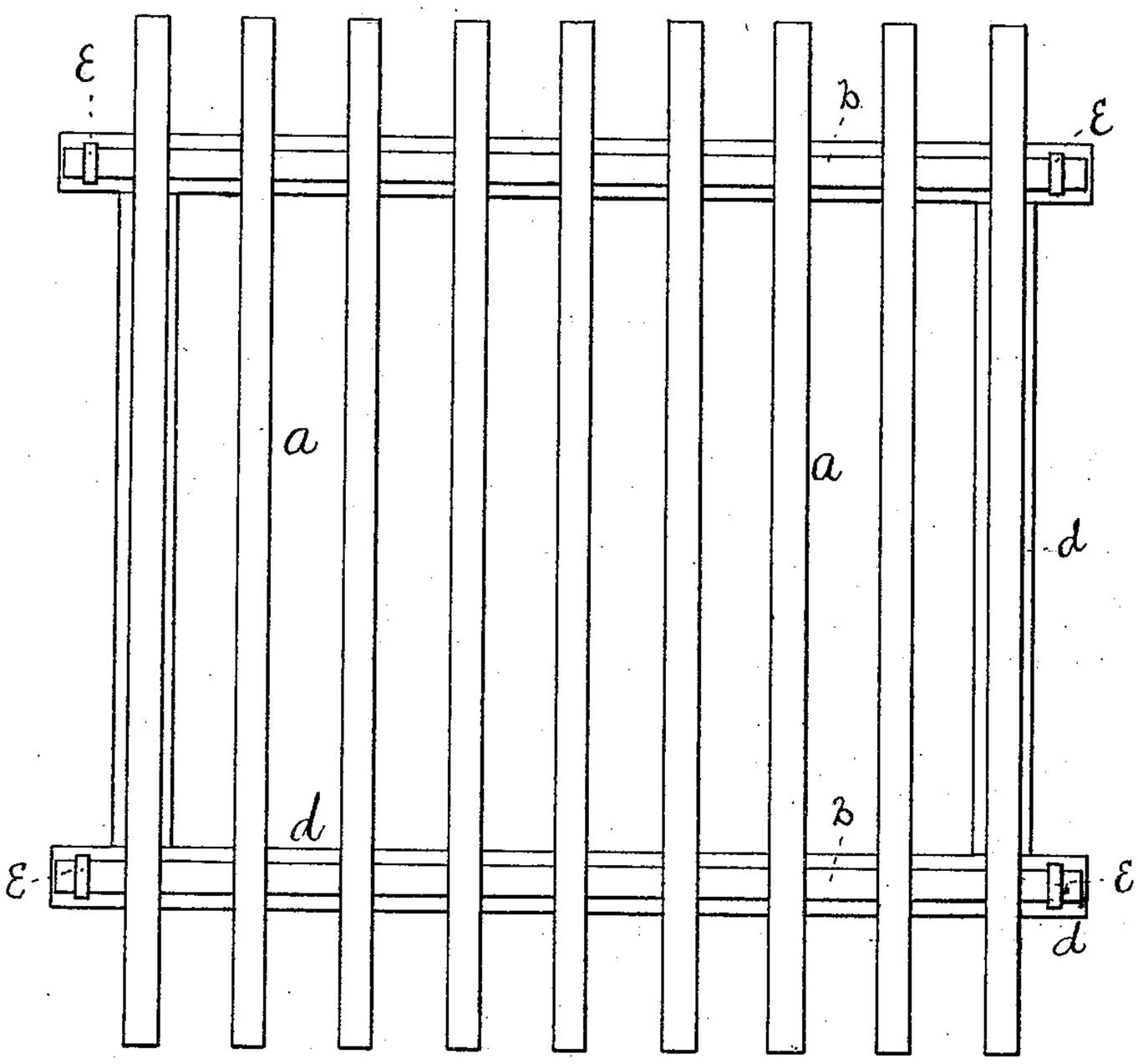

Fig 1

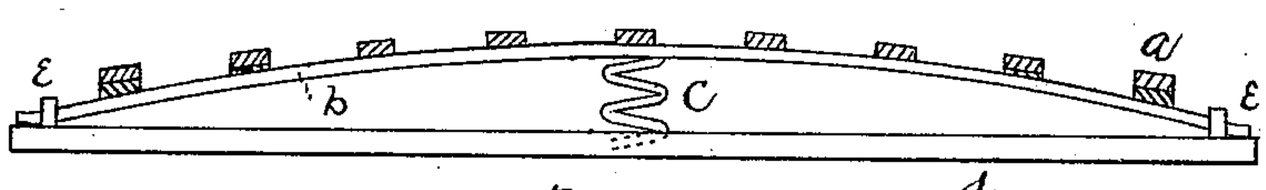

Fig 2

WITNESSES

Herbert G. Briggs

Edgar L. Brown

INVENTOR

Andrew C Miller

Per

Wm. Henry Clifford

atty.

UNITED STATES PATENT OFFICE.

ANDREW C. MILLER, OF PORTLAND, MAINE, ASSIGNOR OF ONE-HALF HIS RIGHT TO WILLIAM DAVENPORT, OF SAME PLACE.

IMPROVEMENT IN SPRING BED-BOTTOMS.

Specification forming part of Letters Patent No. **181,586,** dated August 29, 1876; application filed July 22, 1876.

To all whom it may concern:

Be it known that I, ANDREW C. MILLER, of Portland, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Spring Bed-Bottoms; 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 which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Figure 1 is a top elevation of the bed-bottom. Fig. 2 is an end view of the same.

Like letters show like parts.

This invention relates to an improvement in spring bed-bottoms, such as have been made of longitudinal slats, fastened upon the top of transverse springs, which are secured at their ends rigidly to a frame; and it consists in making the ends of the transverse springs movable and free by holding them upon the frame by means of staples, through which their ends may play, as may be made necessary by the weight of persons lying upon the bed.

a represents the longitudinal slats; *b*, the transverse springs; *c*, the coil-springs, supporting the transverse springs, and applied at the center; *d*, the frame; *e*, the staples.

My invention in no otherwise differs from a well-known form of bed-bottom than in the method of securing the ends of the transverse springs *b* to the frame *d*. Instead of fastening them immovably to the frame, I insert them into staples, which are fixed upon the frame, into which they are fitted closely enough for keeping the springs in place, but allowing the ends to slide within the staples as the springs are bent down by the weight thrown upon the bed.

I prefer the springs *b* of a curved form, as represented in Fig. 2.

I put a coil-spring, *c*, under the middle part of the transverse spring *b*, and resting on the frame *d*. If the transverse spring is pressed down, its ends, being free, will move out through the staples. In like manner, when the pressure is taken off, its ends will move back through the staples. The office of the coil-spring is to increase the elasticity of the transverse ones, and to keep them centered.

I prefer that the top surface, as a whole, of the longitudinal slats should be curvilinear transversely to some degree, to counteract the tendency to rolling into the center of the bed. I prefer two transverse springs, each placed at a short distance from the ends of the longitudinal slats.

A bed-bottom thus constructed is more nearly certain to retain its form, is noiseless, and cheaper of construction than any other known to me.

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

1. In a spring bed-bottom, the transverse springs *b*, having their ends free, moving through the staples *e*.

2. In a spring bed-bottom, the transverse springs *b*, having their ends free, moving through the staples *e*, in combination with the slats *a*, the coil-spring *c*, and the frame *d*, substantially as set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

ANDREW C. MILLER.

Witnesses:
HERBERT G. BRIGGS,
CHARLES E. CLIFFORD.