

W. J. MYERS.

BED-BOTTOM.

No. 183,772.

Patented Oct. 31, 1876.

Fig. 1.

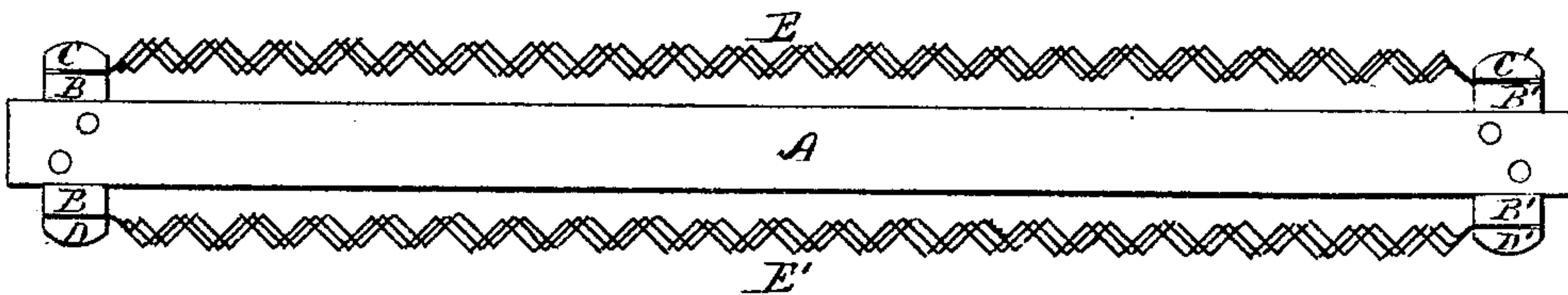
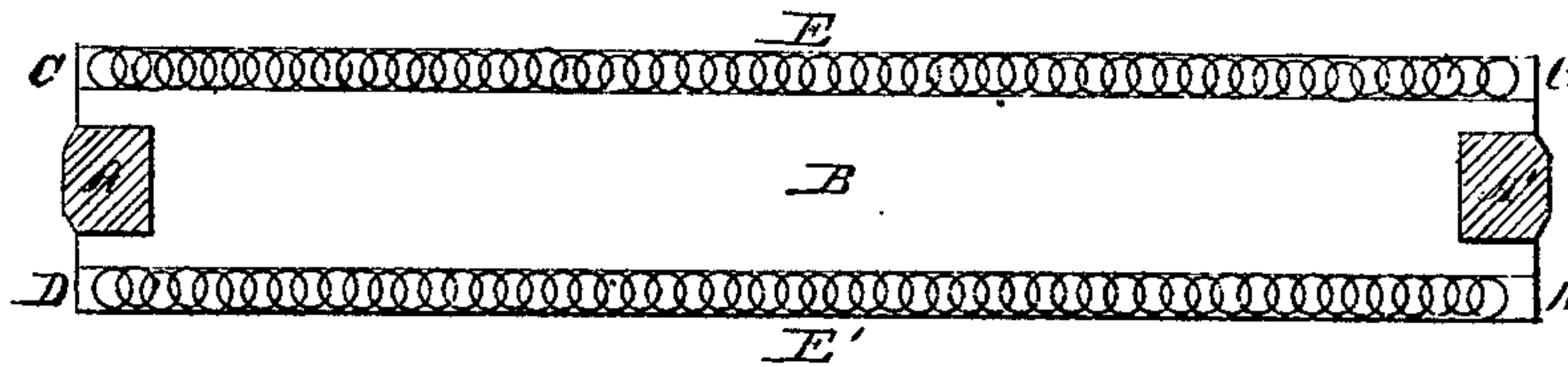


Fig. 2.



Witnesses.

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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN BED-BOTTOMS.

Specification forming part of Letters Patent No. 183,772, dated October 31, 1876; application filed September 7, 1876.

To all whom it may concern:

Be it known that I, WILLIAM J. MYERS, of Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Reversible Woven-Wire Mattresses; and I do hereby declare that the following is a full, clear, and exact description thereof, whereby a person skilled in the art can make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Like letters in the figures indicate the same parts.

My invention relates more particularly to mattresses or bed-bottoms which have the web composed of coils of wire in a spiral form, interlaced or interlocked together; but it is applicable also to bed-bottoms the web of which is composed of any elastic material.

The object of my invention is to produce a more yielding and elastic bed, which can be used either side uppermost, and which shall be much lighter and more easily handled than such beds as there are at present made.

My invention consists in a mattress or bed-bottom constructed and arranged as will be hereinafter described.

In the accompanying drawings, Figure 1 shows a side view of my improved bed. Fig. 2 shows a cross-section of the same through the middle, looking outward toward the end.

A A' are the side bars of the frame. B B' are the end bars. These may be firmly bolted or screwed to the side bars at any desired angle, or they may be hung on a single bolt or swivel passing through the side bar, so as to be free to turn and accommodate themselves to the tension on the web, as will be described. C C' D D' are bands screwed or bolted to the end bars B B', for the purpose of embracing the ends of the web and firmly securing it to the end bars of the frame. E and E' are the two layers of the web. These are attached to the bottom and top of each of the end bars B and B'. They are placed under a high degree of tension when the frame is put together, so that they are tight, and are capable of supporting a considerable degree of pressure.

With my improved bed it is not intended to have the web so stiff, or, when coiled wire is used, it is not intended to have it composed of so many strands, as when the bed is single, as ordinarily constructed.

The action of my improved bed is as follows: When pressure is brought to bear upon the top surface it yields until it reaches the lower web, when it receives the additional support of this lower side, and becomes of a greater stiffness, so as to more readily support the weight. This gives great softness and elasticity, when even a light weight is imposed upon it, and at the same time gives a sufficient supporting-power to resist the greatest pressure that is likely to be brought upon it when in use.

By means of my invention a much lighter frame can be used than is possible with beds of this kind as usually constructed.

The great bending-strain produced upon the side bars of an ordinary frame by the tension of the web suspended at some distance above them requires that they must be very heavy and stiff, while with my improvement the strain is equalized above and below, so that the side bars have only to resist the simple tension of the web in the direction of their length.

With my improved bed it is obvious that either side may be used uppermost, and that the two webs may have the same or different degrees of tension, thereby possessing a great advantage over beds of the ordinary construction.

What I claim as my invention is—

1. A reversible mattress or bed, composed of two elastic webs extended upon opposite sides of a frame, substantially as herein described.

2. The frame A A' B B' C C' D D', constructed substantially as and for the purpose herein described.

WILLIAM J. MYERS.

Witnesses:

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