

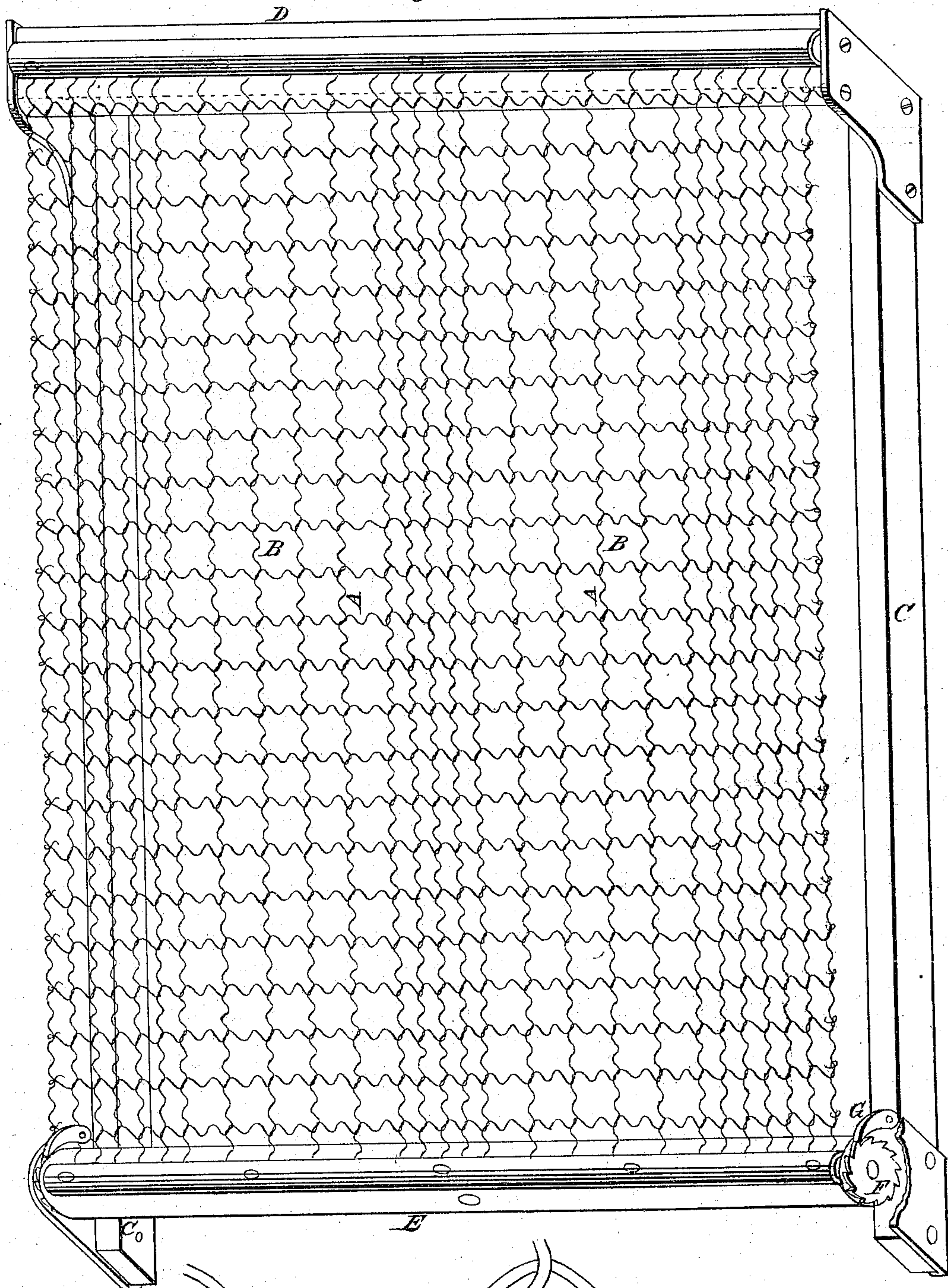
W. D. ADAMS.

Improvement in Spring Bed Bottoms and Sofas.

No. 124,927.

Patented March 26, 1872.

Fig. 1.



Witnesses:

W. M. Cuneen

J. A. Lossing

Fig. 2.

Inventor:

William D. Adams

UNITED STATES PATENT OFFICE.

WILLIAM D. ADAMS, OF POUGHKEEPSIE, NEW YORK, ASSIGNOR OF TWO-THIRDS OF HIS RIGHT TO CHARLES RICH, OF SAME PLACE.

IMPROVEMENT IN SPRING BED-BOTTOMS AND SOFAS.

Specification forming part of Letters Patent No. 124,927, dated March 26, 1872.

Specification describing certain Improvements in Spring Bed-Bottoms, Sofas, &c., invented by WILLIAM D. ADAMS, of Poughkeepsie, in the county of Dutchess and State of New York.

The first part of my invention relates to the combining of a series of spiral springs, horizontally arranged crosswise to each other by lacing, weaving, locking, or spinning them over, under, or into each other at the crossings, and thereby forming a web of spiral springs, composed of a warp and woof thoroughly united together; the object being to distribute the strain over nearly all the springs, and also to equalize it over the different portions of each spring, both in the woof and warp of the bed-bottom.

I am aware that spring-beds have been made of spiral springs, horizontally arranged, and twisted or wound into each other, thereby forming a web of springs; but the springs were always arranged side by side in parallel lines, with no springs or filling running crosswise.

The second part of my invention relates to combining the spring-web with a frame by attaching the web to the cross-piece at one end of the frame, and to a roller which extends across the bedstead at the other end of the frame, and, by means of a ratchet attached to the ends of said roller, strain the web or bed-bottom, and thereby at all times I have the means of producing and maintaining the desired tension of the springs, and to a nicety adjusting the degree of elasticity most desirable.

I will now describe my invention with reference to the drawing.

Figure 1 is a perspective plan view of my improved spring bed-bottom. Fig. 2 is a sectional view (enlarged) of two springs, showing the crossing of the warp and woof in my bed-bottom.

Like letters indicate like parts.

A A are the springs composing the warp, and B B the woof or filling of my improved spring-web for a bed-bottom, sofa, &c. These

springs are made by winding the wire around a mandrel or rod of suitable size.

To construct the web, I place the warp-springs horizontally and parallel to each other, and then lace, lock, or weave the woof-springs over, under, through, or into the warp-springs, and crosswise of them, securing the ends, as shown.

It is not essential that these springs be made of round wire. Square or other shapes will do; but round wire is most easily obtained. Nor is it necessary to use a particular size of wire. The smaller the wire, the greater the number of springs required and the closer the web will have to be.

C C D E is the frame, the corners of which may be secured together in any of the usual ways, except that the roller E must be pivoted to the side pieces C C in such a manner that it may be rotated to strain the web and produce the desired tension of the springs. F are the ratchets, which are securely attached to the roller E, and, in combination with the catches G, prevent the roller E from turning when the catches G are engaged. These ratchets are made in the usual form, and do not require further description to enable those skilled in the art to make and use them.

I attach the ends of the warp-springs A firmly to the cross-piece D of the frame and to the roller E, and then rotate the roller E until the desired tension of the springs is produced; then engage the catches G, and the structure is complete.

It may be found most convenient to use metal corner-pieces for securing the frame together, like those shown; or any other device may be used.

I make no claim to the spiral springs alone, nor to a web composed of spiral springs, when arranged parallel with each other, and having no woof or filling crossing them. I make no claim to a roller and ratchets, when used for straining a cloth or canvas bed-bottom, for I am aware that these are not new.

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

1. The construction of a series of spiral springs into a web by lacing, weaving, or locking the springs over, under, or into each other crosswise, thereby forming a warp, A, and woof, B, substantially as and for the purposes hereinbefore set forth.

2. The roller E, ratchets F, and catches G,

in combination with a spiral-spring web, when constructed in the manner described, and for the purposes set forth.

WILLIAM D. ADAMS

Witnesses:

M. M. VINCENT,

Z. A. LOSSING.