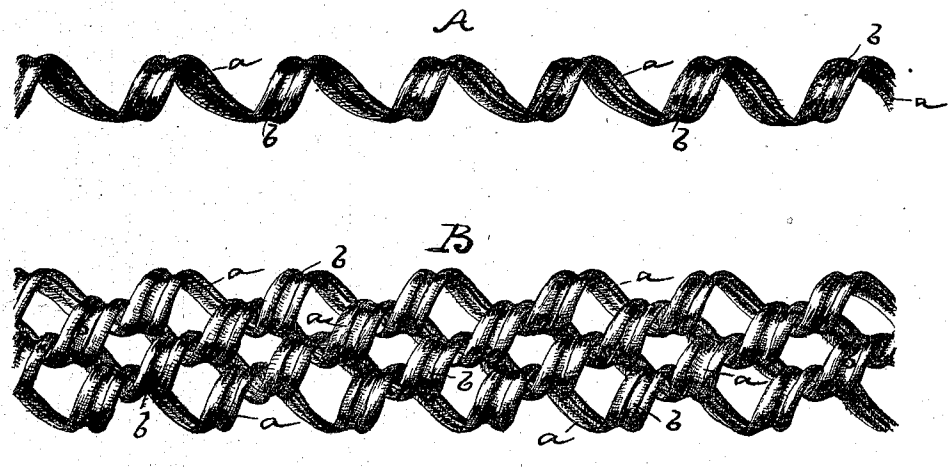
W. A. LE ROW.

Improvement in Spring and Spring Fabrics.

No. 131,885. Patented Oct. 1, 1872.



Witnesses.
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L. W. Kidder

Inventor.
William A. Le Row,
By his Attys.
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AM. PHOTO-LITHOGRAPHIC CO. N.Y. (OSBORNE'S PROCESS.)

UNITED STATES PATENT OFFICE.

WILLIAM A. LE ROW, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND E. R. FLINT, OF SAME PLACE.

IMPROVEMENT IN SPRINGS AND SPRING FABRICS.

Specification forming part of Letters Patent No. **131,885**, dated October 1, 1872.

To all whom it may concern:

Be it known that I, WILLIAM A. LE ROW, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improved Spring and Spring Fabric; and I do hereby declare that the following, taken in connection with the drawing which accompanies and forms part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

My invention relates to the construction of a spring and spring fabric, to be particularly employed for a bed-bottom, or for analogous purposes.

In my invention I make a spring by taking a strip of thin metal, preferably steel, and forming in the strip corrugations running in the direction of the length of the strip; and I then form from this corrugated strip a coiled spiral spring, which spring possesses great flexibility and also great strength, the spring having a great degree of elasticity, both in the direction of its length and radially.

The invention consists, primarily, in this construction of a spring, and for a bed-bottom or similar use, I combine springs of this kind by interlocking the coils, the fabric thus produced, and which constitutes part of my invention, being strong, elastic, proof against injury from torsional strain, and peculiarly adapted for stretching for bed-bottoms.

The drawing represents at A and B, respectively, a plan of a single spring embodying my invention, and a plan of a series of such springs combined to form the fabric.

a denotes the strip of metal, made with corrugations *b*, and spirally wound to form the coils *c*. *d e f* show a series of the spiral springs interlocked, as seen at *g*, thereby forming the fabric or sheet spring. The springs in the fabric may vary in size or width of strip, and in strength and degree of elasticity, in accordance with the respective position each is to occupy in the fabric with relation to the weight to be supported upon the fabric, and the springs may be closely coiled or formed with closely-wound spirals, and be used as cords or connecting devices as well as for springs. By attaching the fabric to a suitable frame, a degree of elasticity and strength is obtained at every point that is unattainable by any other construction of spring-bed foundation.

I claim—

1. The coiled spring *c*, formed from a strip, *a*, which is corrugated, substantially as shown and described.

2. The fabric composed of a series of coiled springs, each made from a corrugated strip, substantially as shown and described.

Executed this 23d day of May, A. D. 1872.

WM. A. LE ROW.

Witnesses:

FRANCIS GOULD,

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