

J. T. Foster & J. J. & J. H. Banta,

Bed Spring.

N^o 16,972.

Patented Apr. 7, 1857.

Fig: 1.

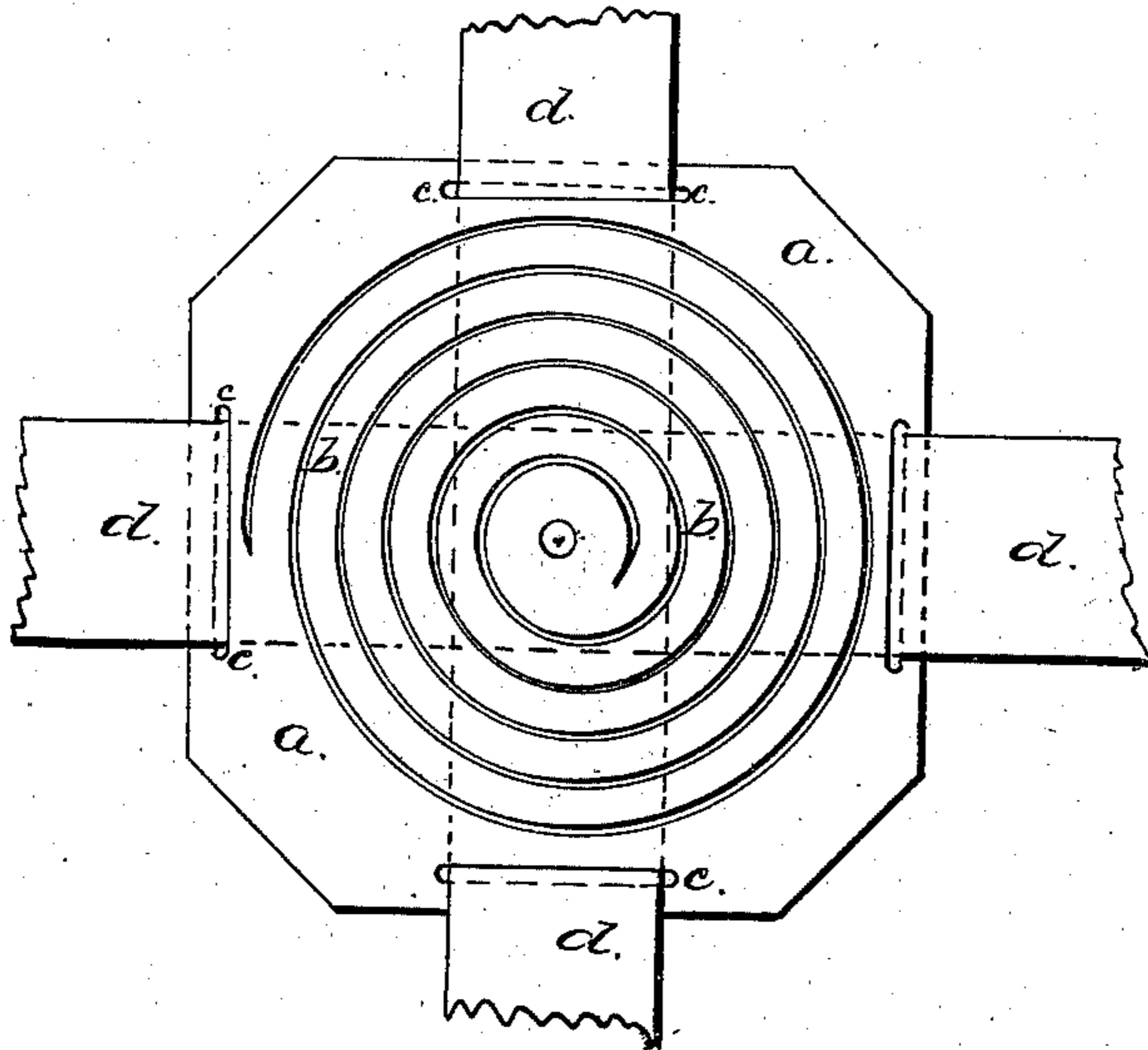
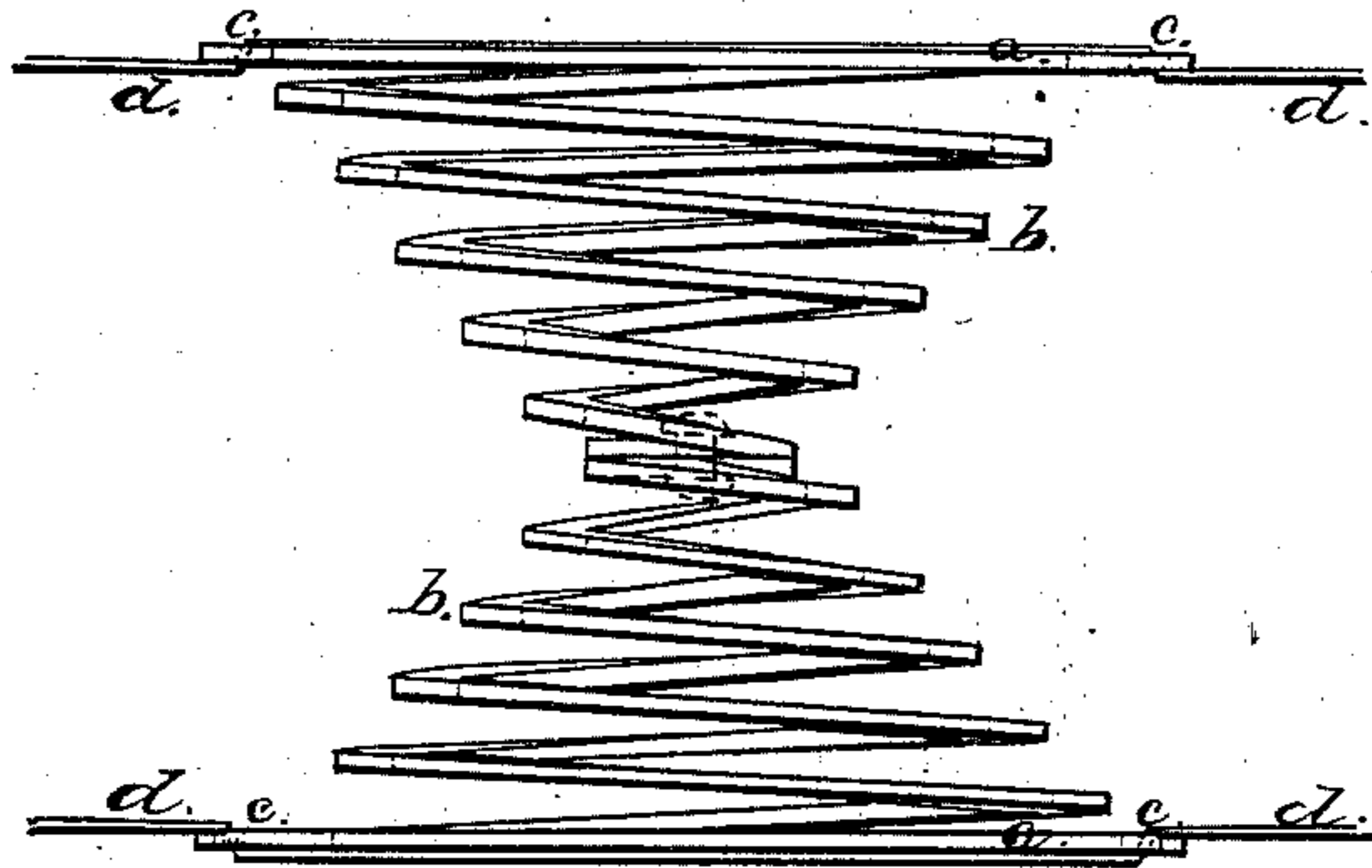


Fig: 2.



Witnesses:

Samuel H. Cornell

Thomas H. Howard

Inventors:

J. T. Foster

J. J. Banta

J. H. Banta

UNITED STATES PATENT OFFICE.

J. T. FOSTER AND J. J. BANTA, OF JERSEY CITY, NEW JERSEY, AND J. H. BANTA, OF
PIERMONT, NEW YORK.

FORMING SPIRAL SPRINGS FOR CHAIRS, SOFAS, AND OTHER ARTICLES.

Specification of Letters Patent No. 16,972, dated April 7, 1857.

To all whom it may concern:

Be it known that we, JOHN T. FOSTER and JACOB J. BANTA, of Jersey City, in the county of Hudson and State of New Jersey, and JAMES H. BANTA, of Piermont, in the county of Rockland and State of New York, have invented, made, and applied to use a new and Improved Spiral Plate-Spring for Sofas, Chairs, and Similar Purposes; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing, making part of this specification, wherein—

Figure 1 is a plan of a single spiral spring and Fig. 2, is an elevation of a double spiral or hour glass spring; similar marks of reference denote the same parts.

Springs for chairs, sofas and similar articles have heretofore been formed with metallic wire bent into a single or double spiral spring, but it is well known that these are often upset to one side and become inefficient.

Our invention consists in the use of a metallic plate *a* of a size and shape to occupy the place allotted for each spring; we prefer that said plate should be of steel and near the middle thereof we commence, and by any suitable tool, cut a circle almost out of the plate and then carry said cut in a scroll or spiral form around and around said plate cutting off the width of metal necessary for the required strength and stiffness of spring, until the cut approaches to the desired proximity to the edge of said

plate. The operation of cutting or a suitable tool, causes the spring *b* to rise above said plate as shown. The spring should increase in width as it increases in diameter to render its power uniform.

When two springs are set with their apex together and there riveted, a very efficient double spiral or hour glass spring is formed. Two or more of these springs might be cut out of one plate, and that might form the bottom of the chair or sofa. When the upper ends of springs require lacing, or the lower ends set onto webbing, we provide slots *c, c*, in the plate *a* near the edges thereof and insert suitable webbing or bands *d, d*, which connect the springs together; and the one plate supports that adjoining, although the springs are still allowed to work freely.

Our spring is cheap, durable, and efficient, and very easily applied or repaired; and may be attached to the sofa or chair bottom by nails or screws as usual.

We claim—

The spirally cut metallic plate spring applied to sofas, chairs and similar articles, substantially as and for the purposes specified.

In witness whereof we have hereunto set our signatures this nineteenth day of December, 1856.

J. T. FOSTER.
J. J. BANTA.
J. H. BANTA.

Witnesses:

LEMUEL W. SERRELL,
THOMAS G. HAROLD.