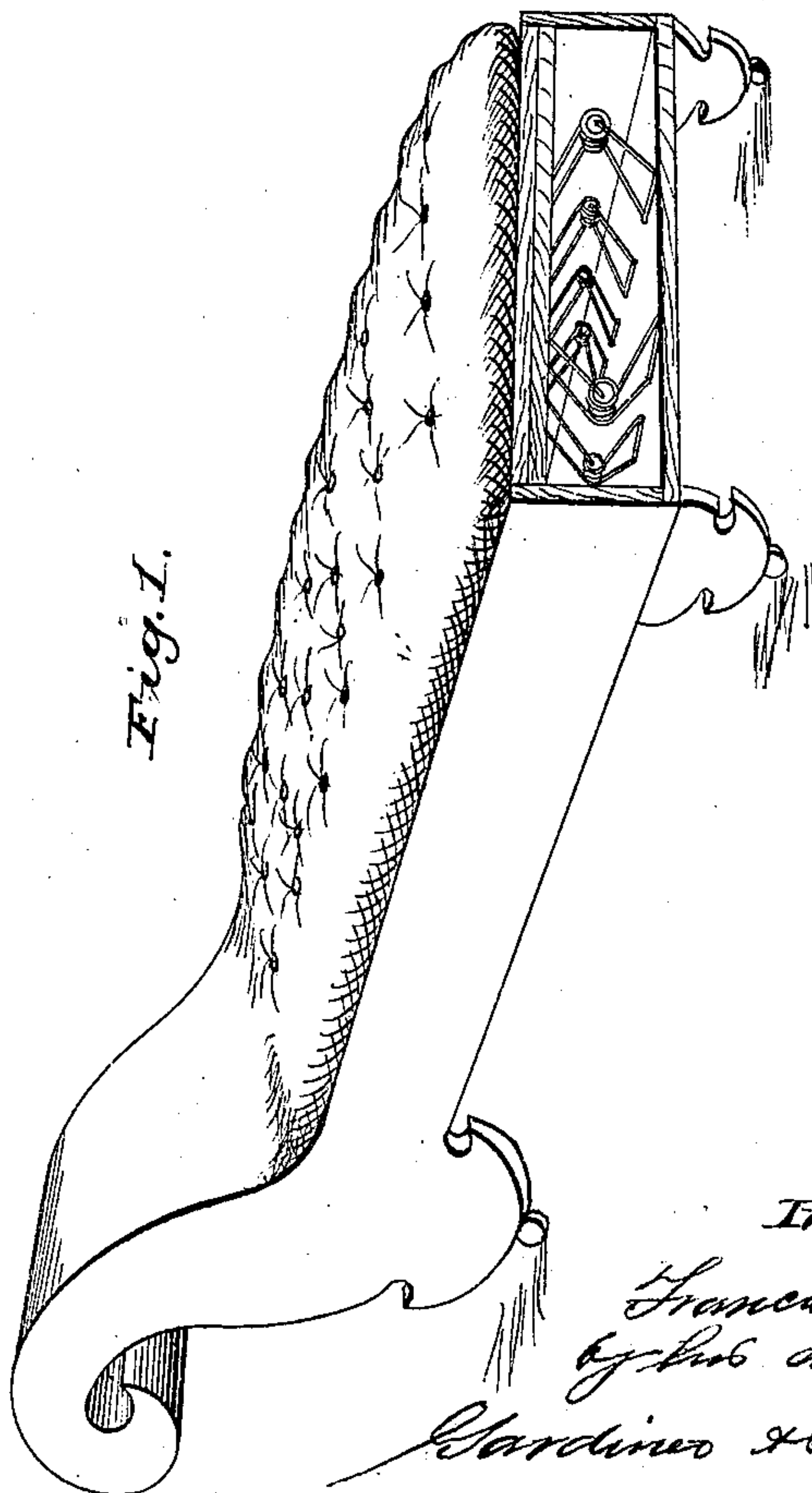
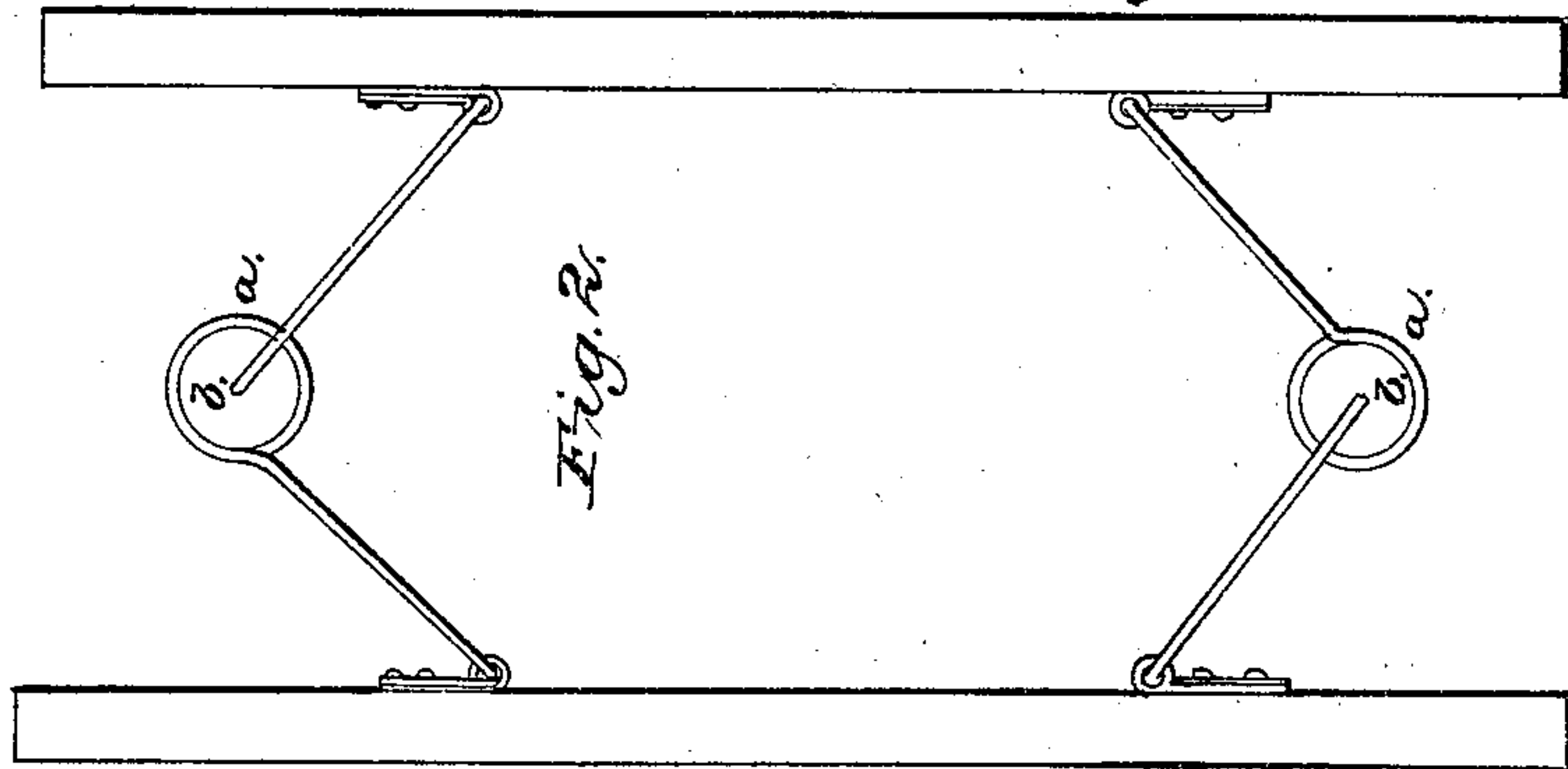
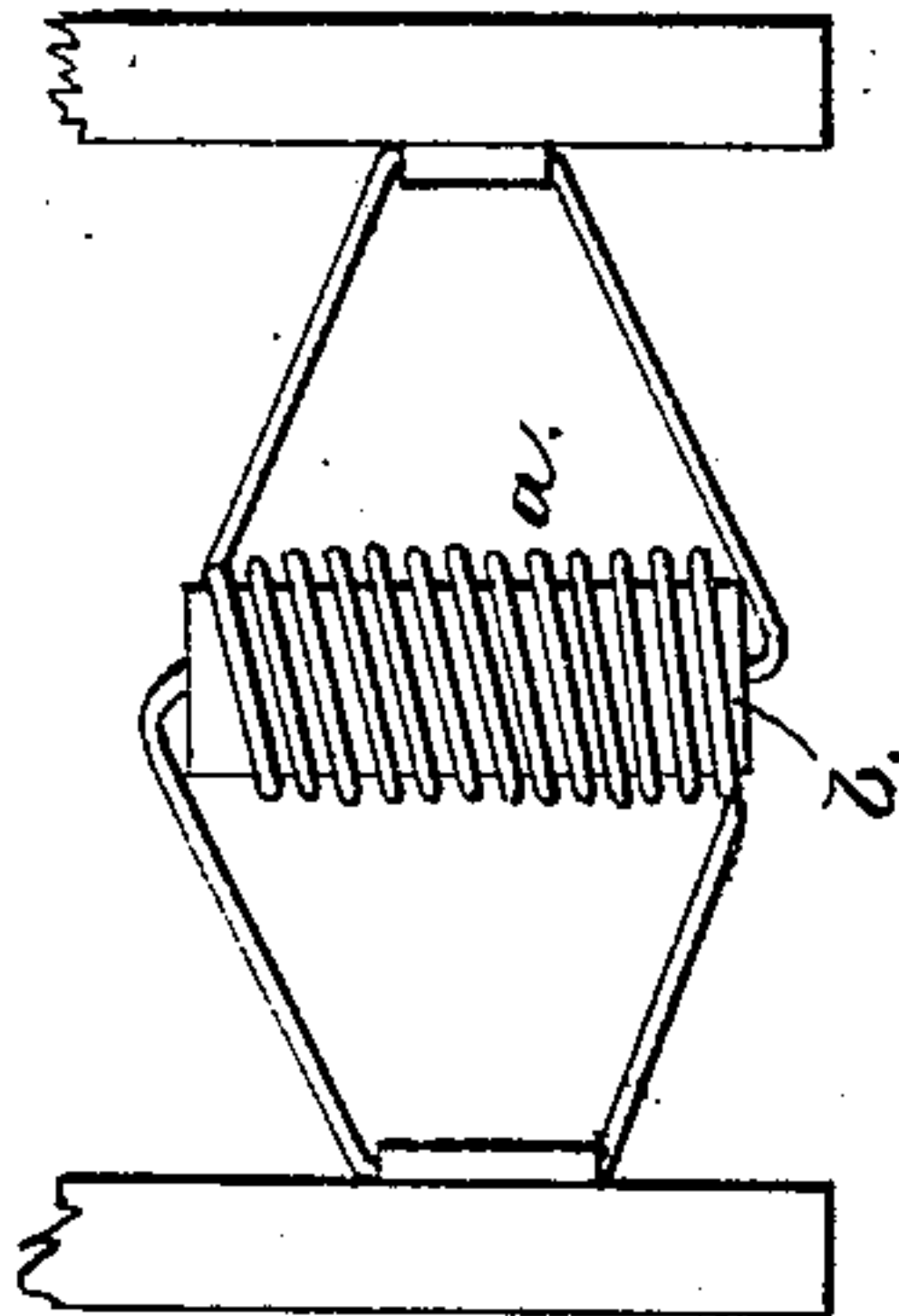


F. Frajns,

Furniture Spring,

Nº 67, 186,

Patented July 30, 1867.



Attest:
R. F. Hyde
Thos. C. Rodney

Inventor:
Francis Frajns
by his attorney
Cardiner & Hyde

United States Patent Office.

FRANCIS FRAPS, OF SPRINGFIELD, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND B. C. ENGLISH, OF THE SAME PLACE.

Letters Patent No. 67,186, dated July 30, 1867.

IMPROVED SPRING FOR BEDS AND LOUNGES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, FRANCIS FRAPS, of Springfield, Hampden county, Commonwealth of Massachusetts, have invented certain new and useful improvements in Springs for Beds, Lounges, &c.; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon. In the drawings—

Figure 1 is a side view of my spring, and

Figure 2 an end view of a lounge showing its application.

This invention consists of a new and improved arrangement of bed or lounge spring, whereby it is rendered more lasting and noiseless.

In construction I form my spring of a wire, *a*, which is wrapped around a plug or cylinder, *b*, formed with a hole through it. The wire is wrapped so as to form two loops, one above and the other below the cylinder *b*, while the ends are inserted into the cylinder at each end in the hole provided for them. The loops form about a right angle to each other, having the cylinder *b* at the apex.

The manner of attaching these and their arrangement in the article of furniture may be varied, all that is required being the compression of the ends of the loops towards each other (lessening the angle) to give a spring. The advantages of this spring over those in common use are, that the wires being all separate from each other, and the ends of the same confined in the wooden cylinder, no grating noise is produced when the spring is worked; and the peculiar arrangement of the coil around the cylinder *b* prevents it from weakening to the degree that other springs do after constant use. In the ordinary coil spring there is always liability of its upper end forcing its way through the material above it. In mine, however, the upper end being formed of the loop, it cannot force itself through, and is easily kept in place by a band sewed on over it.

Now, having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A spring, for beds, lounges, &c., formed of a wire, *a*, wrapped around a cylinder, *b*, so that a loop extends out from each side at an angle, the ends of the wire being inserted in the ends of the cylinder, substantially as described.

FRANCIS FRAPS.

Witnesses:

R. F. HYDE,

EDWD. H. HYDE.