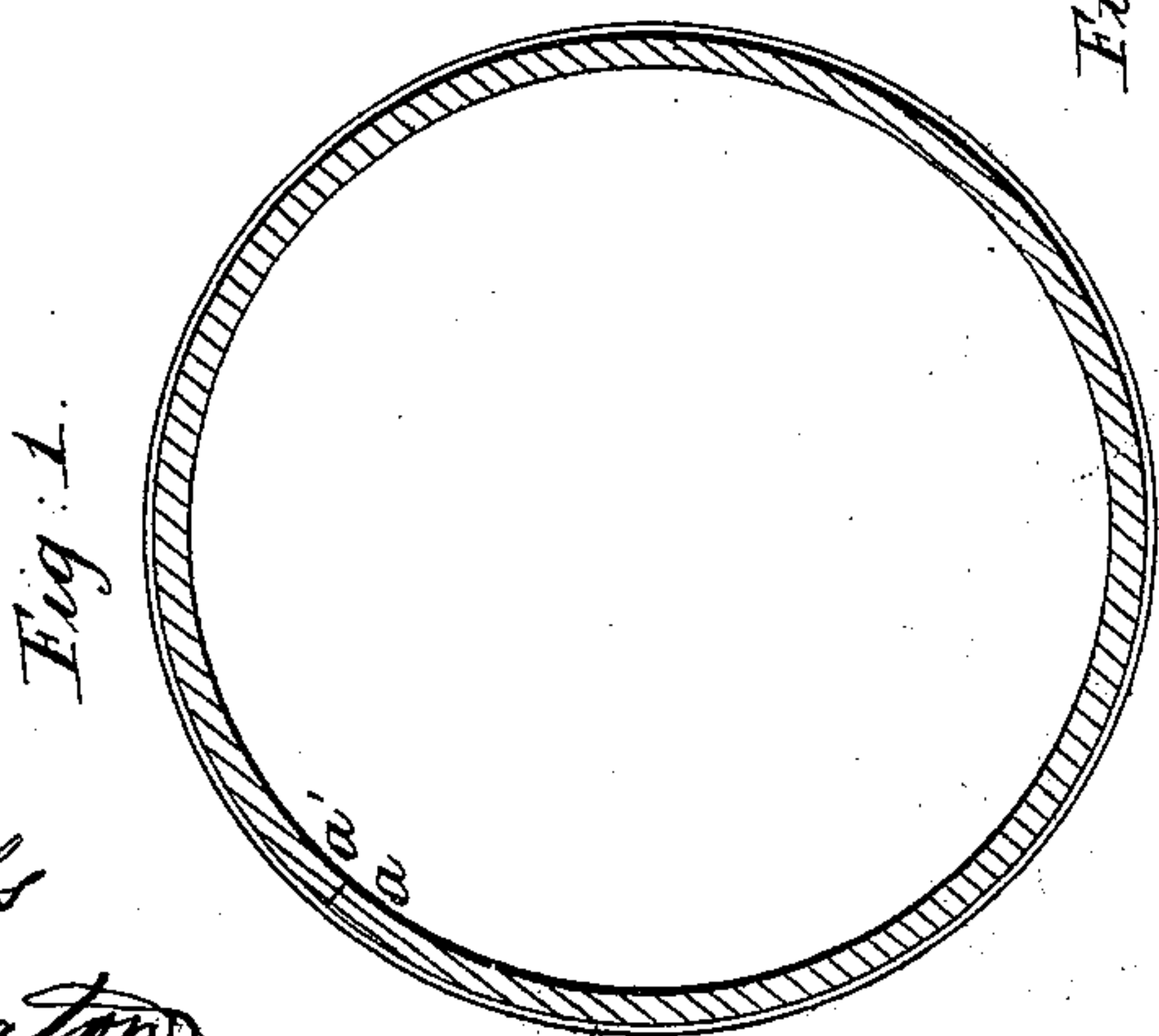
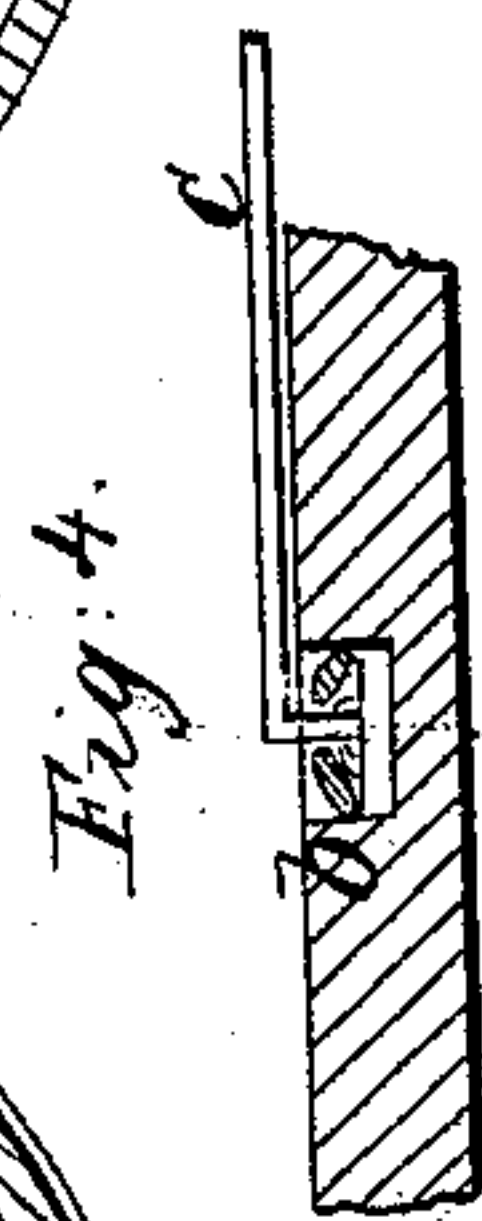
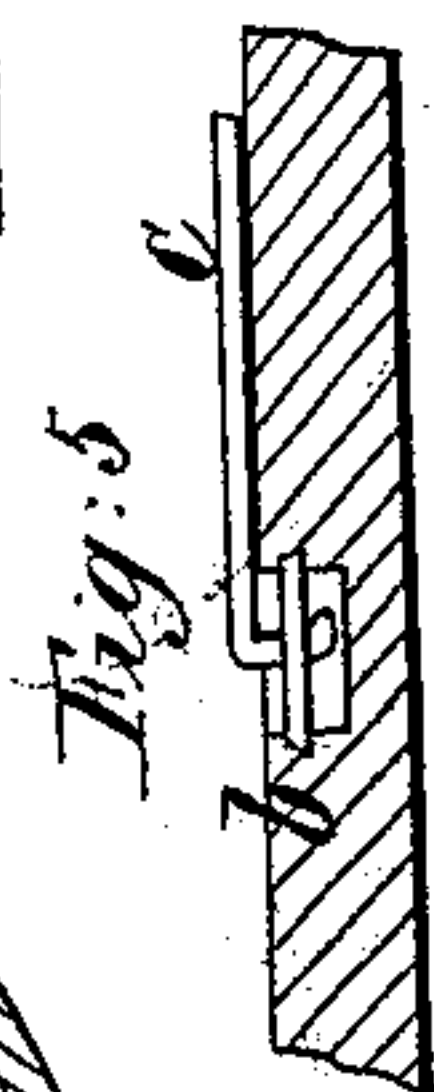
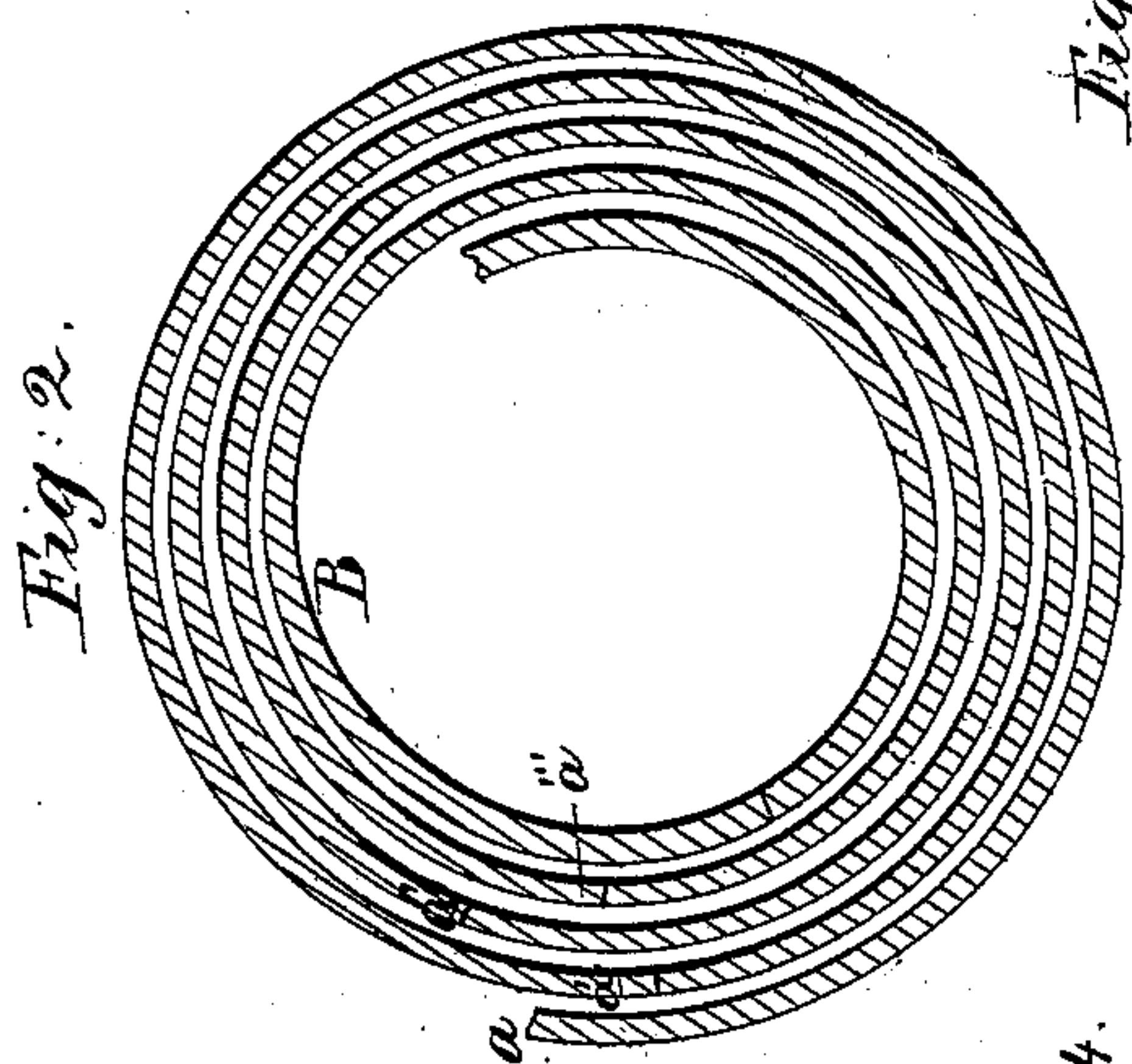
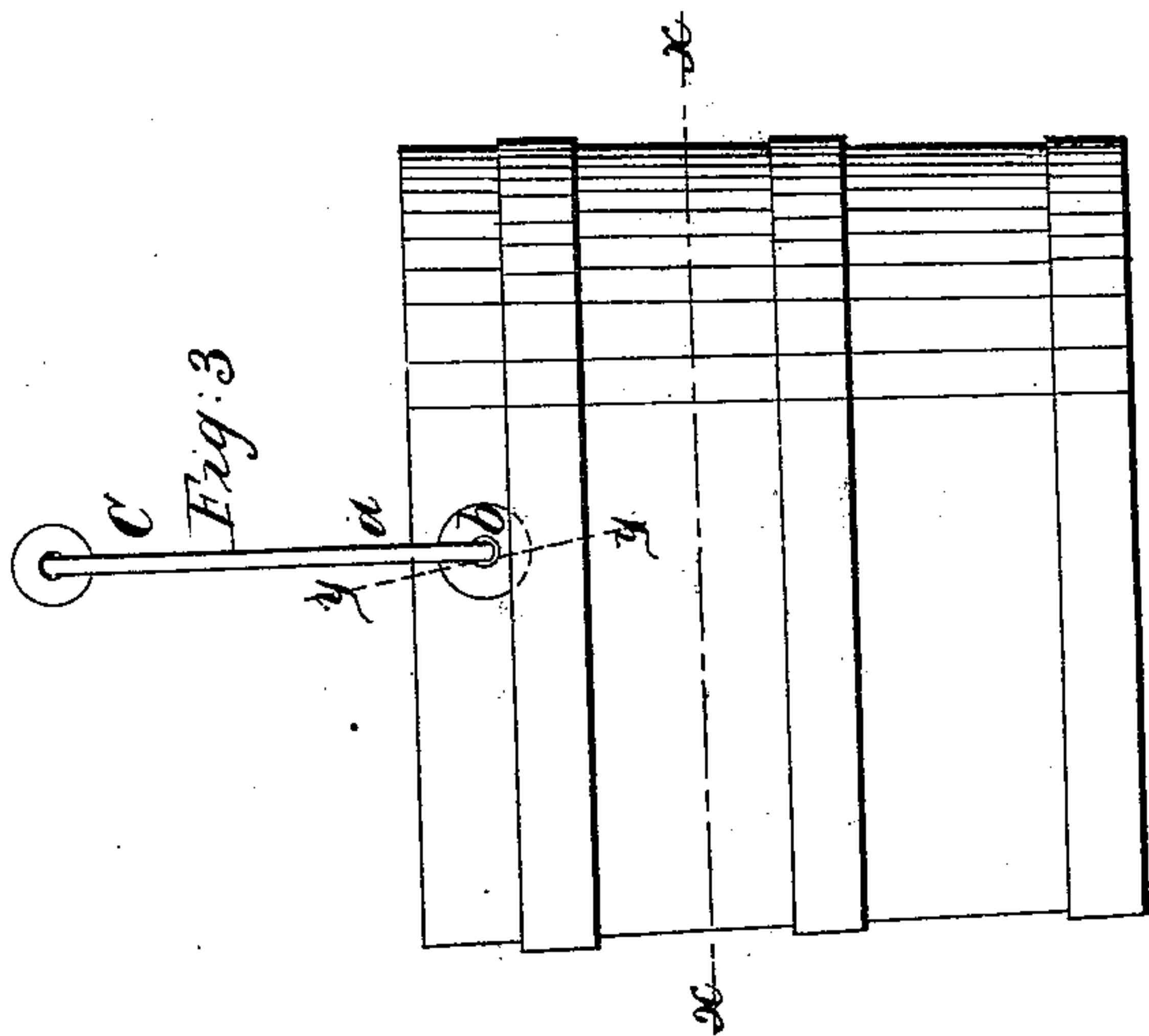


L. A. Fleming.
Bucket Elev.

N^o 96,571.

Patented Nov. 9, 1869.



Witnesses:
Alex. J. Roberts
J. W. B. Curington

Inventor;
L. A. Fleming
per Munroe & Co.
attorneys

United States Patent Office.

LEONARD ASA FLEMING, OF NEW YORK, N. Y.

Letters Patent No. 96,571, dated November 9, 1869; antedated November 1, 1869.

IMPROVEMENT IN EARS OF WOODEN BUCKETS.

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, LEONARD ASA FLEMING, of the city, county, and State of New York, have invented new and useful Improvements in the Manufacture of Wooden Vessels; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a cross-section through the line *xx*, fig. 3, of a bucket constructed from a scroll of wood.

Figure 2 is a cross-section of a spiral scroll sawn from the wood, and from which the vessel is made.

Figure 3 is a side view of a bucket, complete.

Figure 4 is a cross-section of my improved ear-plate before the same is flattened.

Figure 5 is a similar view of the ear when flattened within the recess.

Similar letters of reference indicate corresponding parts.

My invention consists in the construction of bail-ears for wooden vessels, and their application to such vessels.

The invention is applicable to all wooden vessels, but is more especially designed to be used upon those made from a continuous scroll, cut from a block of wood, of proper length, as will be hereinafter more fully described.

The spiral scroll, as shown at B, fig. 2, is cut by the ordinary belt-saw, well known to the art of scroll-sawing.

The taper for employing hoops, in the construction of the vessel, is given by resting the base of the block from which the scroll is being sawn upon any suitable incline, in juxtaposition to the edge of the saw.

Portions of the scroll are taken to form a vessel, and in taking such portions, I find it best, in prac-

tice, to sever the scroll at some point beyond the preceding severed end of the scroll, so that the ends of the part taken to form a vessel shall slightly overlap each other, as shown at *a' a'' a''' a''''*, fig. 2, so that the meeting ends will spring together from the natural contractility of the sawn scroll.

The groove for the bottom is reamed out, the bottom set in, and the hoops drawn on, in the obvious manner.

The ear-plates *b*, by which the bail *C* is attached to the bucket, are affixed within circular recesses in the side of the vessel, by forming the said plate in a concave disk, through which the bail passes, as shown at fig. 4.

Each concave disk, when set in its recess, fits therein, with easy contact of its edges; but when driven flat, by means of a proper tool, the edges of the disk are expanded, and forced into the sides of the recess, as shown at fig. 5, whereby they are held firmly, and are not liable to get loose, as is the case when the bail-ears are nailed on to the exterior of the vessel, in the common manner.

A block of wood, when sawn in a continuous scroll, in the manner shown, will supply the sides of several-sized vessels.

I claim as new, and desire to secure by Letters Patent—

Attaching the bail to wooden vessels by means of disks *b*, expanded within recesses in the wood, substantially as and for the purpose shown and described.

The above specification of my invention signed by me, this 24th day of February, 1868.

LEONARD ASA FLEMING.

Witnesses:

WM. F. MCNAMARA,
ALEX. F. ROBERTS.