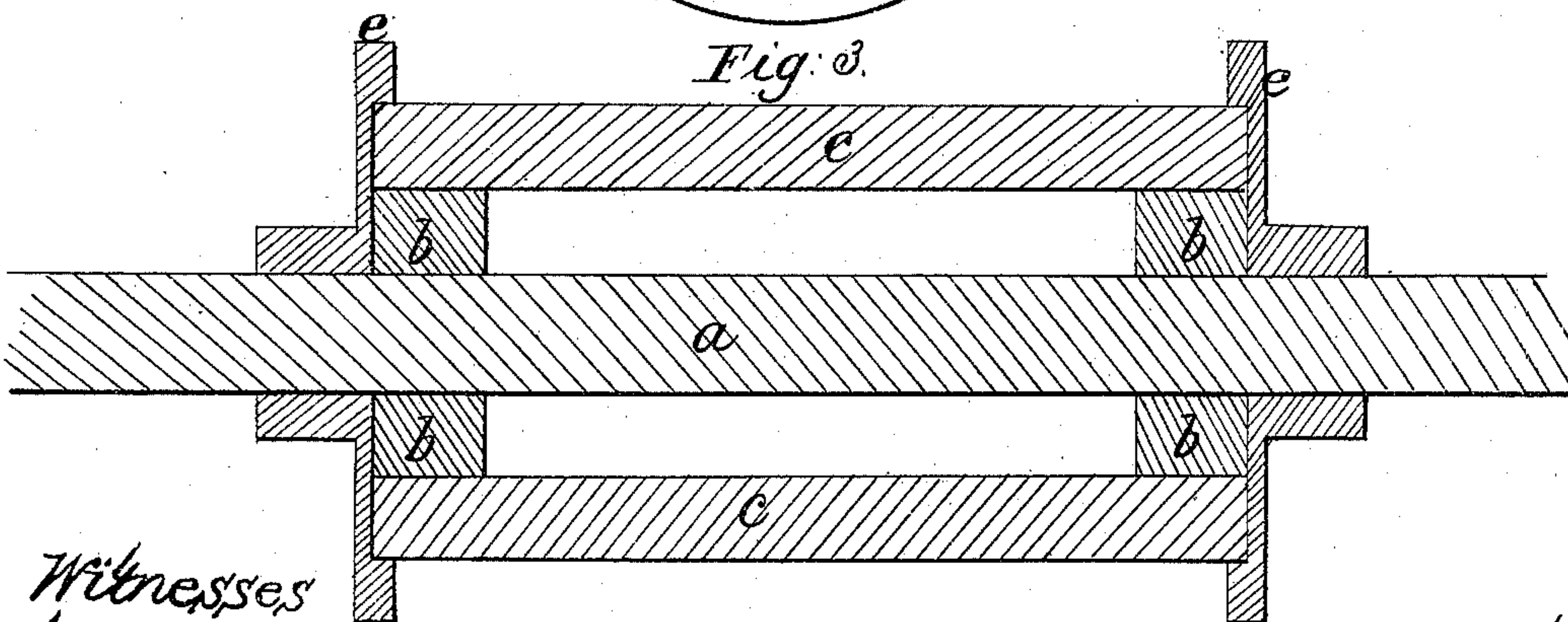
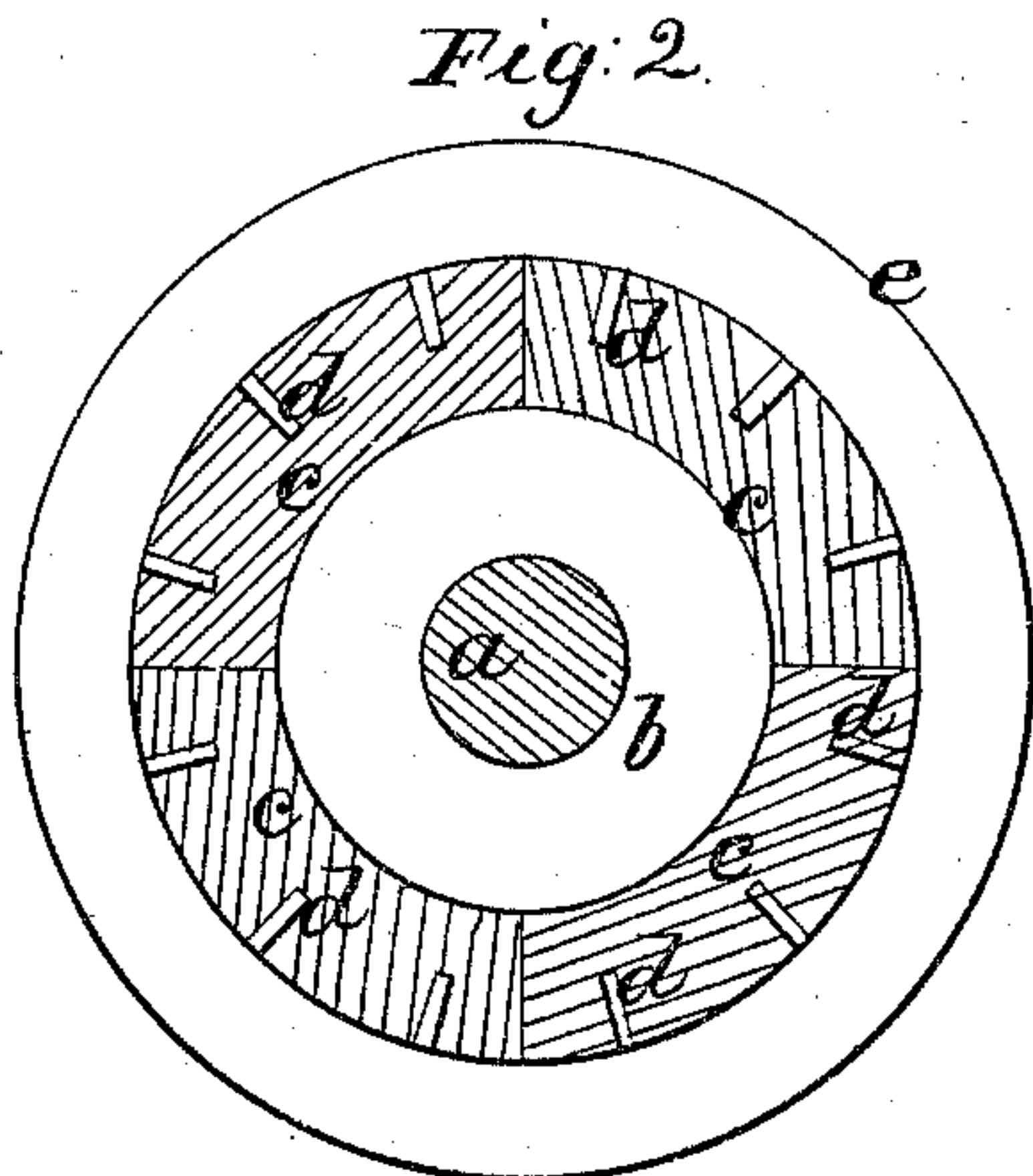
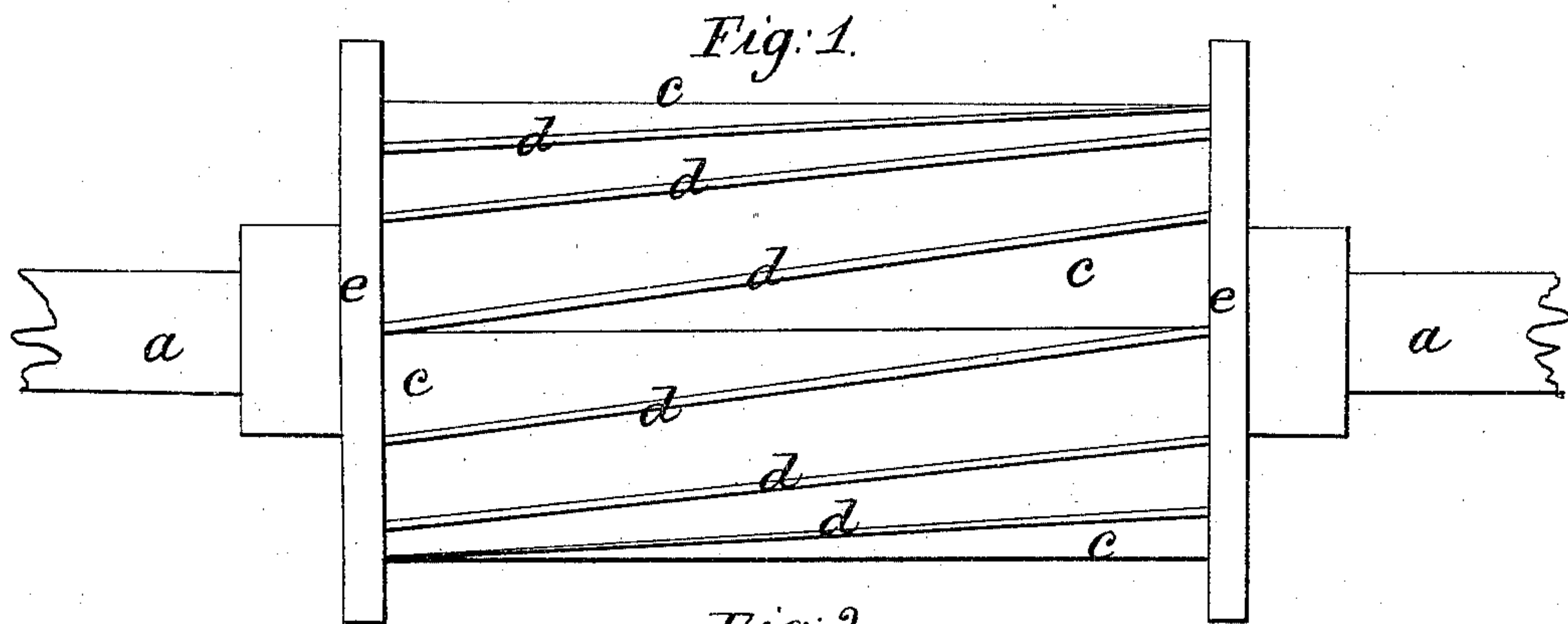


*C. L. Goddard.*  
*Wool Burring Mach.*

*N<sup>o</sup> 56,038.*

*Patented Jul. 3, 1866.*



*Witnesses*  
*Andrew DeLacy*  
*Wm. H. Bishop*

*Inventor*  
*C. L. Goddard*

# UNITED STATES PATENT OFFICE.

C. L. GODDARD, OF NEW YORK, N. Y.

## IMPROVEMENT IN CYLINDERS FOR WOOL BURRING AND CARDING MACHINES.

Specification forming part of Letters Patent No. **56,038**, dated July 3, 1866; antedated June 19, 1866.

*To all whom it may concern:*

Be it known that I, C. L. GODDARD, of the city, county, and State of New York, have invented a new and useful Improvement in Cylinders for Wool Burring and Carding Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is an external view of the inner cylinder ready to receive the burring-rings or card-clothing; Fig. 2, a cross-section, and Fig. 3 a longitudinal section.

The same letters indicate like parts in all the figures.

My said invention relates to an improvement in the construction of cylinders for burring-machines, which said improvement is also applicable to carding-machines; and the object of my said invention is to produce a cylinder which shall not spring under the influence of centrifugal force when rotated at high velocities, nor yield to the forces applied, which shall not warp under the influences of atmospheric changes, and which shall be light and cheap. These properties, it is well known, are very desirable in cylinders for burring and carding machines, and especially for the former.

In the accompanying drawings, *a* represents a shaft with two heads, *b b*. To the outer periphery of these two are secured, by screws or equivalent means, lags of wood *c*, extending all around to constitute a hollow cylinder. I prefer to glue the several lags

together. Radial gains or grooves are cut into this wooden cylinder and extending the whole length of it to receive a series of thin plates, *d*, of metal or hard wood. I prefer to have them diagonal, so that the grain of the wood of the cylinder shall not extend from end to end; but they may be placed parallel with the axis of the shaft, and when the latter mode is adopted it will be best to make the lags of pieces glued together, so as to prevent the wood from working. The outer surface is to be turned true to receive the burring-rings or the card-clothing. Movable metallic heads *e e* are then slipped onto the shaft and there fastened, and the inner faces of these heads are formed to extend for a short distance over the ends of the wooden cylinder to hold the plates or bars *d*.

In this way and at very little cost I am enabled to produce cylinders either for burring or for carding machines which will not spring or warp, and which will be cheaper, lighter, and more durable than as heretofore made.

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

The manner of constructing cylinders for burring and carding machines of a series of wooden lags secured to two heads on the shaft, and with radial bars inserted in grooves or gains cut into the periphery, substantially as and for the purpose described.

C. L. GODDARD.

Witnesses:

WM. H. BISHOP,  
ANDREW DE LACY.