

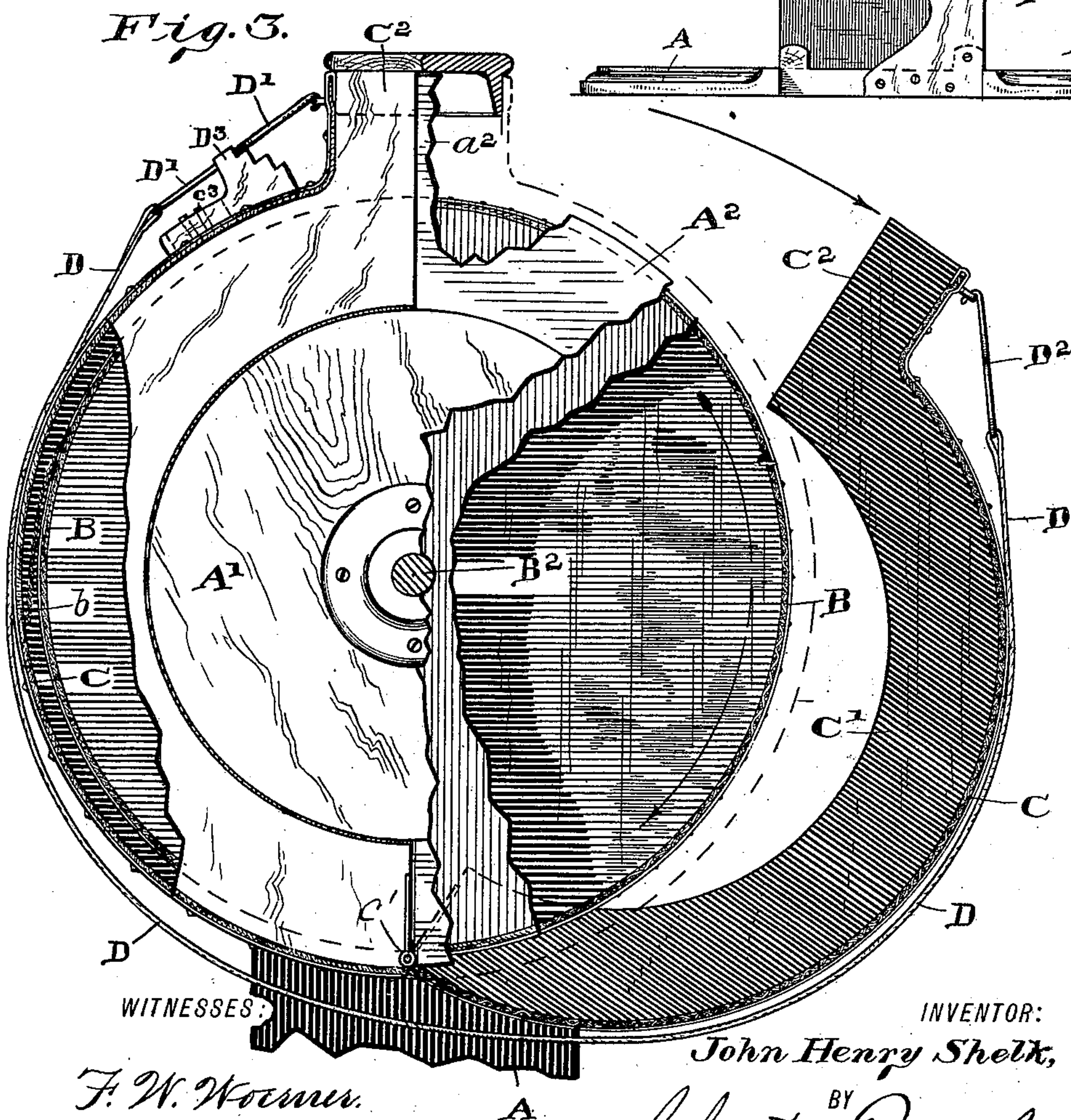
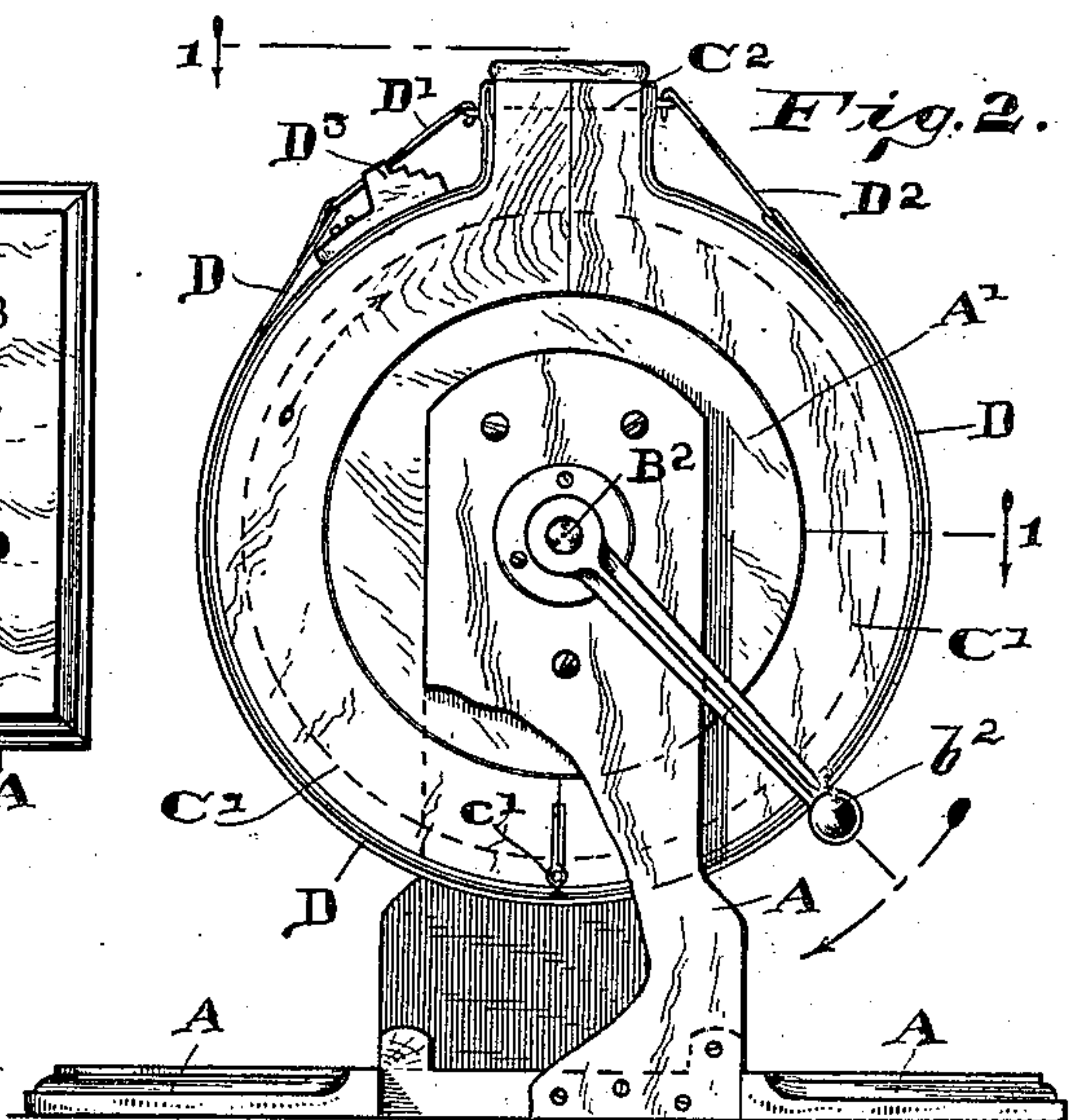
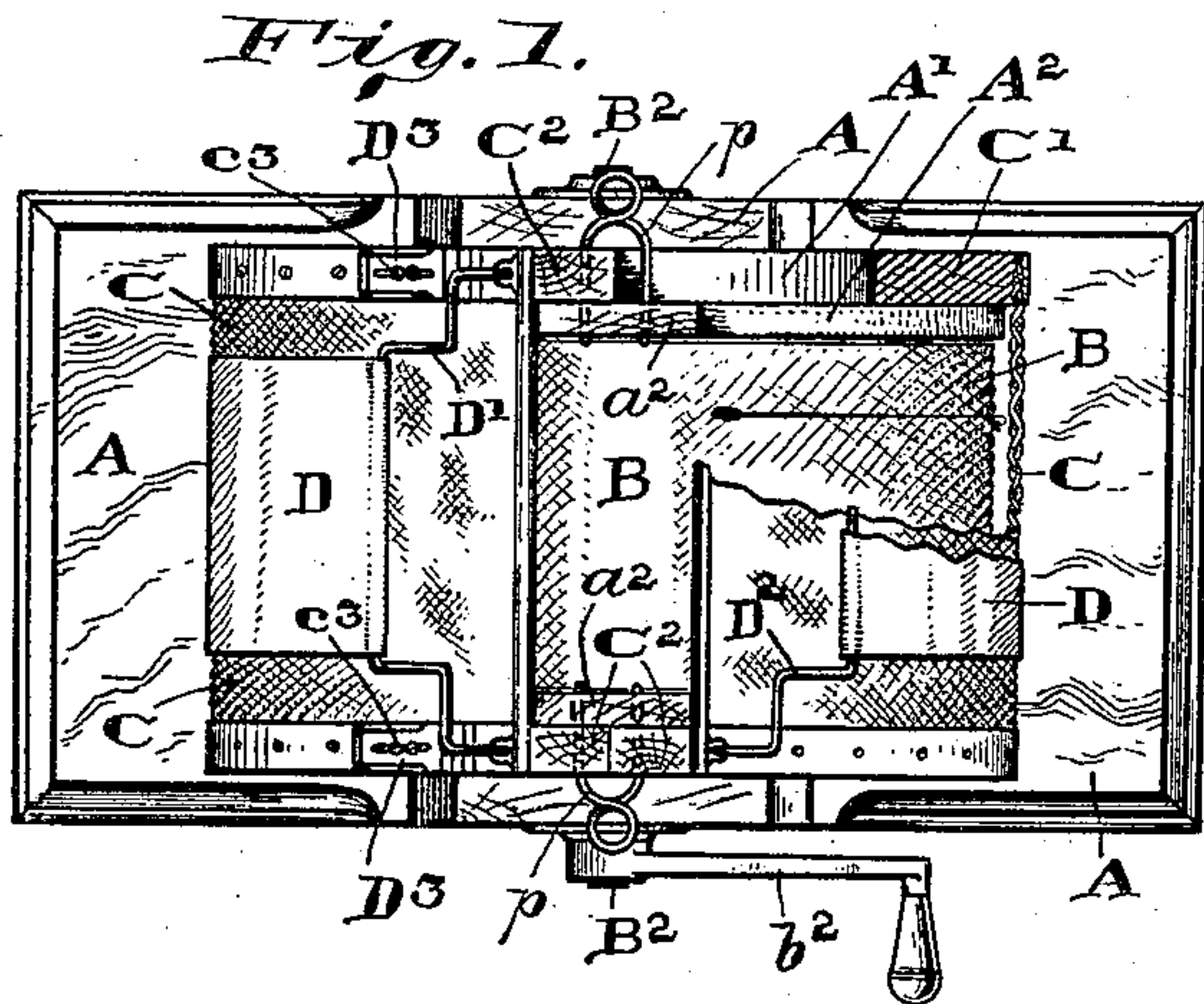
No. 607,090.

Patented July 12, 1898.

J. H. SHELK.
SHOE BUTTON CLEANER.

(Application filed Feb. 21, 1898.)

(No Model.)



WITNESSES:
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JOHN HENRY SHELK, OF SHELBYVILLE, INDIANA.

SHOE-BUTTON CLEANER.

SPECIFICATION forming part of Letters Patent No. 607,090, dated July 12, 1898.

Application filed February 21, 1898. Serial No. 671,002. (No model.)

To all whom it may concern:

Be it known that I, JOHN HENRY SHELK, a citizen of the United State, residing at Shelbyville, in the county of Shelby and State of Indiana, have invented certain new and useful Improvements in Shoe-Button Cleaners, of which the following is a specification.

The object of my said invention is to produce a machine by which shoe-buttons after they have been removed from shoes may be cleaned and the threads drawn from the eyes, so that they may be utilized for further service.

It consists, generally speaking, of a revolving drum or cylinder covered with a coarse fabric and inclosed in a shell the concave portion of which is also composed of a coarse fabric.

It further consists in certain details of construction and arrangements of parts, as will be hereinafter more particularly described and claimed.

Referring to the accompanying drawings, which are made a part hereof and on which similar letters of reference indicate similar parts, Figure 1 is a top or plan view of a machine embodying my said invention, portions thereof being broken away to illustrate the construction more clearly; Fig. 2, a side elevation thereof, a portion of one of the standards being broken away to show the hinge by which the two halves of the shell are connected; and Fig. 3, a view of the operative parts separate from the supporting-frame and on an enlarged scale, various portions being broken away to show the construction beyond.

In said drawings the portions marked A represent the framework of the machine by which the operative parts are supported; B, the revolving drum or cylinder; C, the surrounding shell, and D a band by which the fabric of the shell may be adjusted in relation to the fabric on the drum or cylinder.

The frame A consists, preferably, of a base and two uprights, which uprights contain bearings for the ends of the shaft of the revolving drum or cylinder. Secured to the uprights are disks, each composed of two parts A' and A², the former of which are of less diameter than the latter. Said disks cover the sides of the rotating drum or cylinder

and constitute supports for the inclosing casing of said drum. Projections a² on the portions A² form the ends of the hopper into which the buttons are introduced and also constitute supports to which the upper ends of the inclosing sides are connected when the machine is in assembled operative condition.

The drum or cylinder B is a parallel-sided circular structure, the circumferential surface whereof is covered with a coarse rough fabric, preferably cocoa matting. Upon one side the web of this matting is raveled loose, thus forming whip-like ends b, for the purpose which will be presently explained. This drum or cylinder is mounted on a shaft B², which is adapted to be operated by a crank b².

The inclosing casing C is preferably of the same fabric as the operative surface of the drum. This fabric is carried upon segmental end pieces C', which are secured together at the lower side by hinges c', and the upper ends C² of which extend upwardly and shut over the ends of the hopper within which the buttons to be cleaned are introduced, while the ends of the fabric-like sides C extend up and form the sides of said hopper. These latter are preferably simply bound at the upper end with canvas or some such material, thus reinforcing them and at the same time permitting some flexibility. The ends C², when the device is in assembled condition, are secured together by any suitable means. I have shown forked pins p, passing through said ends and entering the parts a², as such means; but of course hasps or any other suitable devices might be employed for this purpose.

The band D is of canvas or some similar comparatively non-elastic material and is secured at the ends to the sides C' by metal bails D' D². These bails are bent, preferably, to the form shown most plainly in Fig. 1, and under the bail D', I place movable blocks D³, which are secured to the sides C' by suitable pins or screws c³, which pass through slots in said blocks and into said sides. Obviously by moving said block D³ toward or from the upright portions C² of the sides C' the band D will be tightened or loosened, and the space between the casing portion C and the peripheral surface of the drum B thus diminished or increased. Said blocks preferably have

several step-like surfaces upon which the bail may rest, as shown.

The operation is as follows: The quantity of buttons to be treated are placed in the hopper-like space at the upper side and the buttons rest upon the peripheral surface of the drum B. The space between said drum and its casing having been adjusted by means of the block D³ and band D, as just described, to suit the quantity of buttons being treated, the drum is rapidly revolved and the rough coarse portions of the fabric will engage with the threads in the eyes of the buttons and serve to disentangle and remove them, at the same time cleaning the buttons of any dirt which may adhere thereto. This operation is aided, especially in the case of knotted or imperfectly-cut threads, by the tail-like ends *b*. What is a tedious and slow work when performed by hand is thus performed by this machine with great rapidity. When the buttons have been cleaned, the machine is opened to the position shown in Fig. 3 and the buttons and dirt removed, when the buttons will be found to be perfectly clean and free from threads and ready for further use.

Having thus fully described my said invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, in a button-cleaning machine, of a rotary drum covered with a coarse fabric, and an inclosing casing covering the convex sides of the drum, the concave portions whereof are also composed of a coarse fabric, said casing being also provided with a hopper-like opening into which the buttons may be introduced.

2. The combination, in a button-cleaning machine, of a rotary drum covered with a cleaning fabric, and an inclosing casing therefor composed of stationary sides and two mov-

able parts hinged together, said casing terminating in a hopper-like opening into which the buttons may be introduced.

3. The combination, in a button-cleaning machine, of a rotary drum, an inclosing casing therefor surrounding the same, the surrounding portion whereof is composed of a fabric, and a strap surrounding said flexible or fabric portion of said casing and adapted to be adjusted, whereby the space between said casing and said drum may be regulated.

4. The combination, in a button-cleaning machine, with the flexible inclosing casing thereof, of a flexible but substantially non-elastic strap surrounding and resting against said casing and serving to support the same.

5. The combination, in a button-cleaning machine, of a rotary drum, a surrounding casing therefor, the operative portion whereof is flexible and yielding, and an adjustable flexible but substantially non-elastic strap for supporting and regulating the same, and means for adjusting said strap.

6. The combination, in a button-cleaning machine, of a frame consisting of a base and supporting-standards, disks attached to said standards and forming sides between which a drum rotates, said drum, and a casing inclosing said drum and supported on said disks, the peripheral surface of said drum and the adjacent portion of said casing being each composed of a coarse fabric, substantially as set forth.

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 17th day of February, A. D. 1898.

JOHN HENRY SHELK. [L. S.]

Witnesses:

CHESTER BRADFORD,
JAMES A. WALSH.