

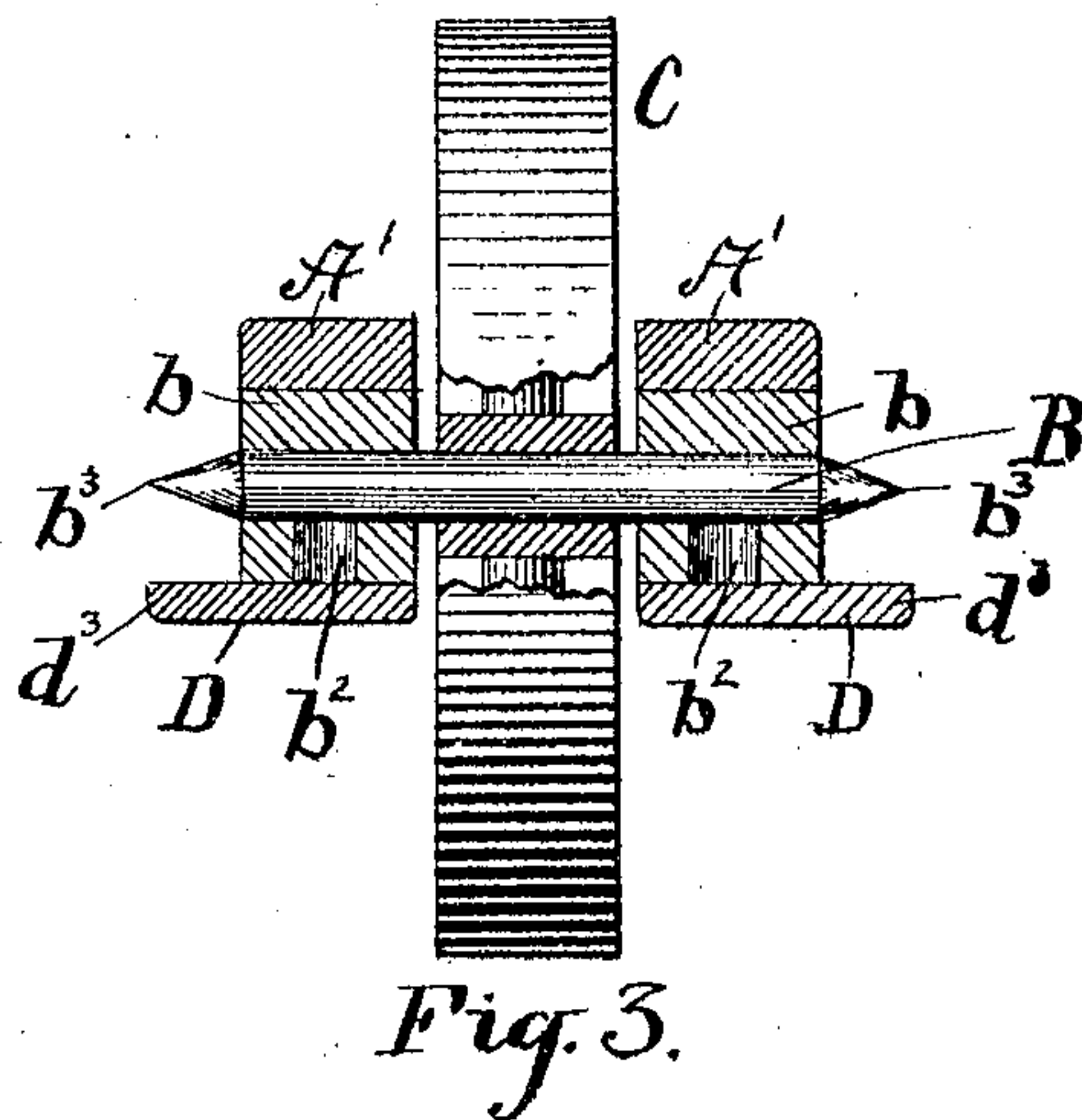
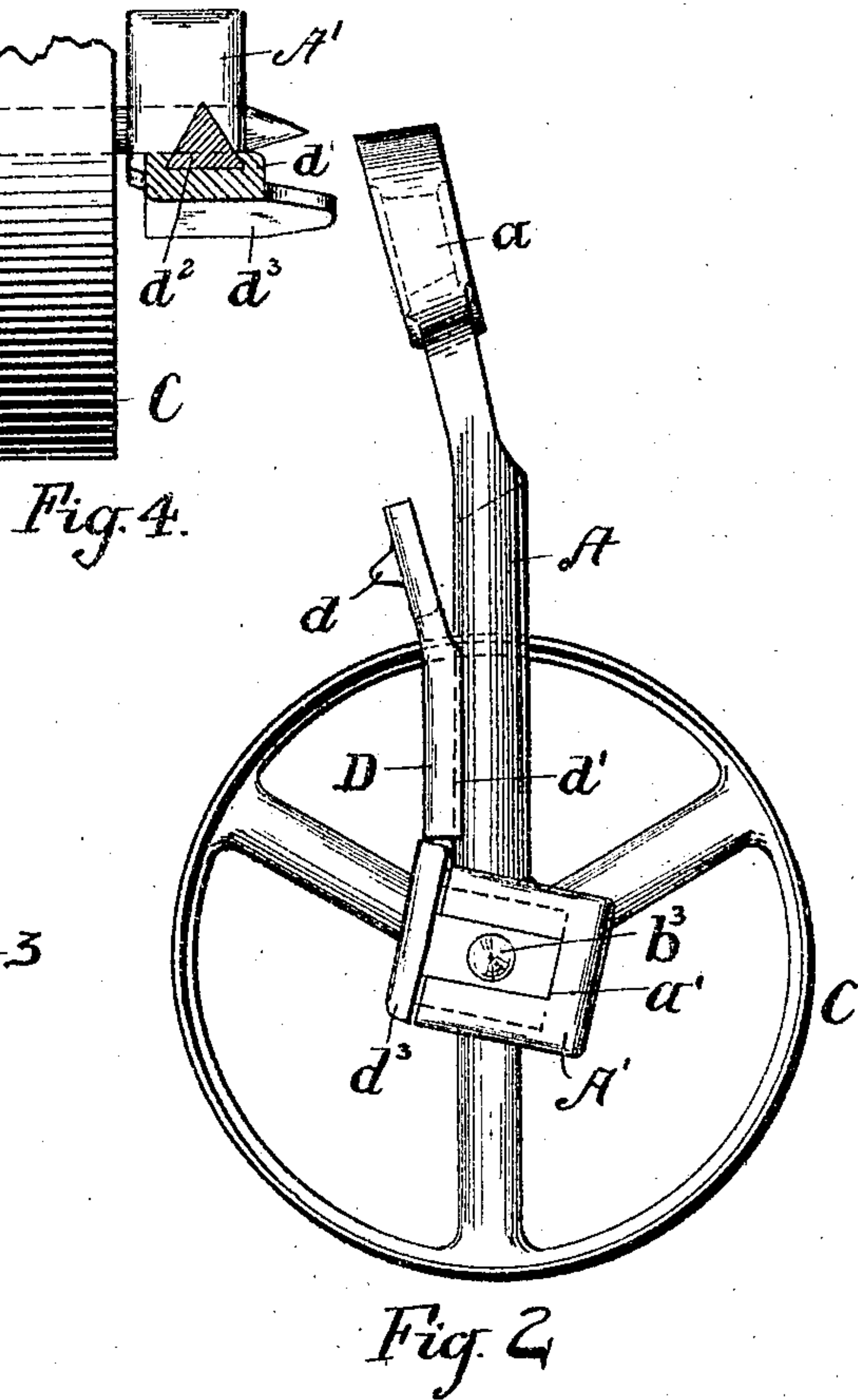
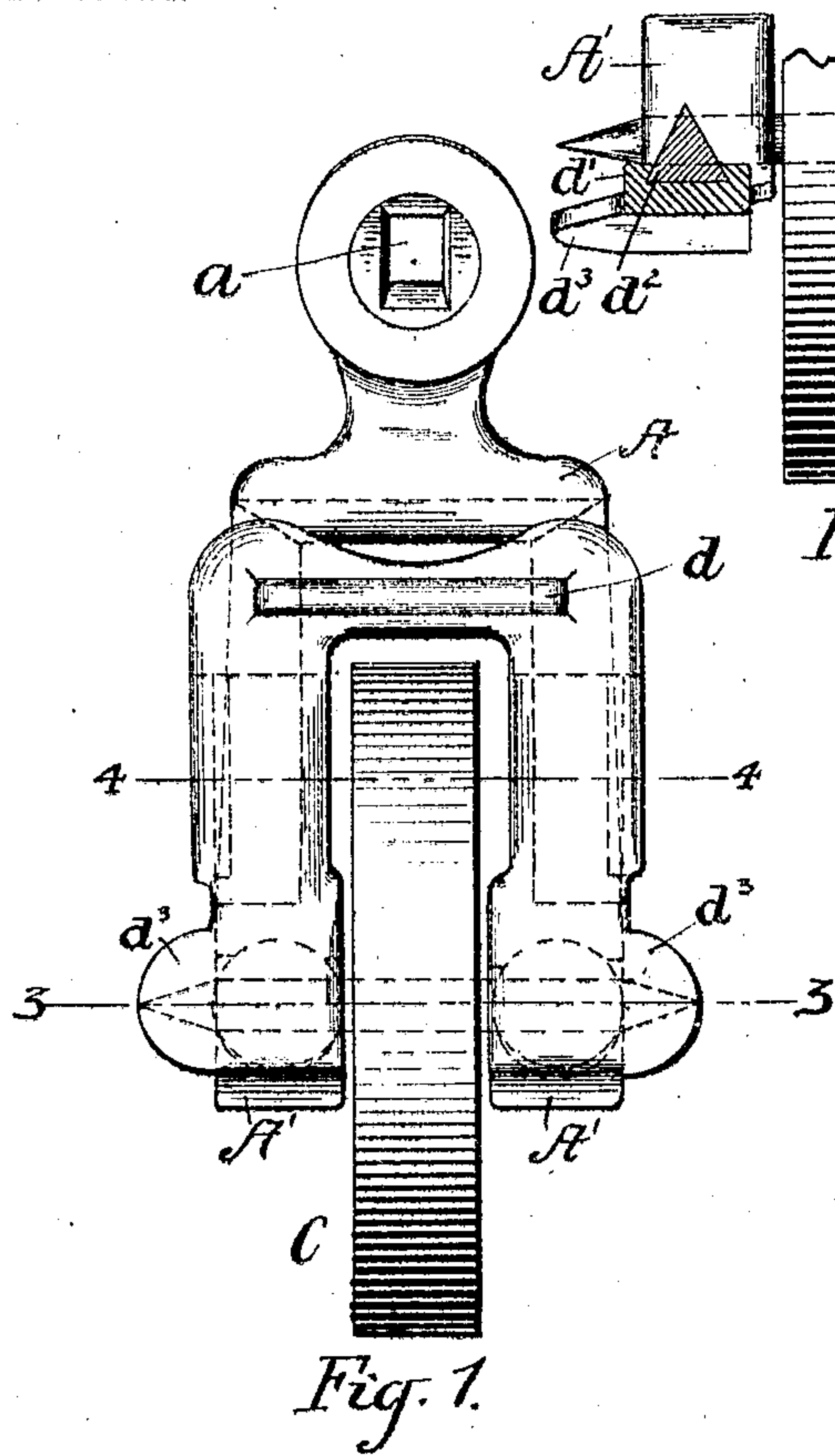
No. 764,584.

PATENTED JULY 12, 1904.

A. A. HASERICK.
TENSION PULLEY.

APPLICATION FILED OCT. 21, 1903.

NO MODEL.



Witnesses:
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UNITED STATES PATENT OFFICE.

ARTHUR A. HASERICK, OF BOSTON, MASSACHUSETTS.

TENSION-PULLEY.

SPECIFICATION forming part of Letters Patent No. 764,584, dated July 12, 1904.

Application filed October 21, 1903. Serial No. 177,950. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR A. HASERICK, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Tension-Pulley Bearings, of which the following is a specification.

Tension-pulleys such as are hereinafter referred to are pulleys used as idlers in roving, spinning, or twisting frames to carry the belt from the power-drum to the spindle, and they ordinarily hang from a bell-crank lever suitably supported and adjustably weighted or otherwise controlled, so as to yield somewhat as the occasion requires. Such construction is well known, and therefore, as it forms no part of this invention, need not be shown in the drawings. Moreover, my invention, as will be hereinafter seen, although especially adapted for use with such tension-pulleys, may be used as well as an idler in other positions or in other connections.

My invention consists more especially in the journal-box and means for covering it, and it will be understood by reference to the drawings, in which—

Figure 1 is a front elevation, and Fig. 2 a side elevation, of a tension-pulley embodying my invention, Fig. 3 being a section on line 33 of Fig. 1 and Fig. 4 a section on line 44 of Fig. 1.

A is a forked support having at its upper end, preferably, a square eye a , which may be slipped over a square stud on the end of the bell-crank above referred to or attached to some other part from which the tension-pulley is to be hung, the end of the square stud being provided with a thread to receive a nut or with other means whereby the forked piece is held in place. Each end of the forked support is provided with a journal-box A' , which I have shown as provided with a cylindrical cavity the diameter of which is slightly greater than the width of the journal-box, so as to form lateral slots a' in the opposite sides of the journal-box to allow the axle B of the wheel to pass therethrough, this being an economical mode of construction. Filling each cavity is a bearing b , consisting in the form of my device shown as a cylindrical wooden cylinder having a passage extending diamet-

rically therethrough to receive the axle B, and also a passage or cavity b^2 , extending axially from its top to meet the diametrical passage.

C is the pulley, mounted on the axle B to turn therewith. I prefer to shape the ends of the axle conically, as shown at b^3 , Figs. 1 and 3, for reasons to be hereinafter described.

D is a cover to the journal-boxes. It is preferably in one piece and is forked, as shown in Fig. 1, and its connecting cross-piece is provided with a rib d , which serves as a handle by which it may be withdrawn to uncover the journal-boxes. This cover-piece is provided with a dovetailed groove on its under surface, formed by downwardly-projecting edges d' , adapted to engage with corresponding projections d^2 on the edge of the forked support, as shown in Fig. 4, so that the forked piece may slide easily to open and close the journal-boxes without falling off from the structure.

Devices of this character are exposed to dust and lint, and it is for this reason that the cover is desirable, and in my improved tension-pulley both covers are removed by the one action of the hand, and after the journal-boxes have been properly tended the cover-piece may be released by the hand and will then fall by gravity into place, covering the journal-box again or be pushed back, as occasion may require,

The openings b^2 in the bearings are for the purpose of introducing grease to lubricate the axle B.

I have stated above that the axle B is preferably made conical at each end, as shown at b^3 . The purpose of this is to allow any thread or lint which may by accident wind itself about the axle B to work itself out from the bearings. It will not do this if the ends of the axle do not penetrate the journal and journal-box. As a further precaution against the accumulation of dust or fibers I prefer to provide the cover-piece D with side extensions d^3 , which may extend from the sides of the box a distance corresponding to the length of the extension of the axle. Of course they may project farther, if thought best; but it would seem to be unnecessary that they should do so. It will be seen that this construction is very simple and inexpensive. While I prefer to

make the sliding cover in one piece, it may of course be made in two parts, if thought best, each piece in this case being provided with suitable means for keeping it in contact with the forked piece A.

While I have described the journal-bearing as cylindrical and the cavity which holds it also cylindrical, I do not mean to confine myself to this form or material for the bearing, as it may prove more convenient to make the journal-box with a square cavity and a bearing to fill it.

What I claim as my invention is—

1. The improved pulley-bearing above described comprising a forked support, each arm of which is provided with a suitable journal-box and a sliding cover adapted to engage said support and slide thereon to open and close said journal-box, in combination with a wheel and an axle located in said bearings, as described.

2. In combination, a wheel, an axle and means for supporting it comprising a forked support having a journal-box on the end of each fork, a bearing located in each journal-box, and a cover forked in shape to correspond with the shape of said forked support, and means whereby said cover is held in sliding contact with said forked support.

3. In combination a wheel, an axle and means for supporting it comprising a forked support having a journal-box on the end of each fork, a bearing located in each journal-box, and means for covering said journal-boxes, and means for maintaining said cover-

ing means in slidable relation with said journal-boxes, as described.

4. In combination, two journal-boxes suitably supported, a wheel and axle, bearings in said journal-boxes adapted to support said axle, each bearing being provided with a cavity whereby said axle may be lubricated, and a cover adapted to slide over and close said boxes and said cavity, as described.

5. A pulley structure comprising a wheel, an axle, and a forked support containing bearings, said forked support being open at the sides as shown to expose the ends of the axle, said axle being cylindrical throughout its bearing-surface and projecting at each end, and being unobstructed outside of said bearings, its projecting ends being conical in shape, whereby any lint catching upon the axle will tend to free itself at the ends thereof, as described.

6. In combination a wheel and axle, journal-boxes therefor suitably supported and containing suitable bearings, and a cover and means whereby said cover is maintained in slidable relation with both of said journal-boxes, said axle projecting beyond the outer walls of said journal-boxes, said cover being provided with overhangs adapted to project from extensions of said axle, as set forth.

In testimony whereof I hereunto set my name this 19th day of October, 1903.

ARTHUR A. HASERICK.

Witnesses:

GEORGE O. G. COALE,
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