

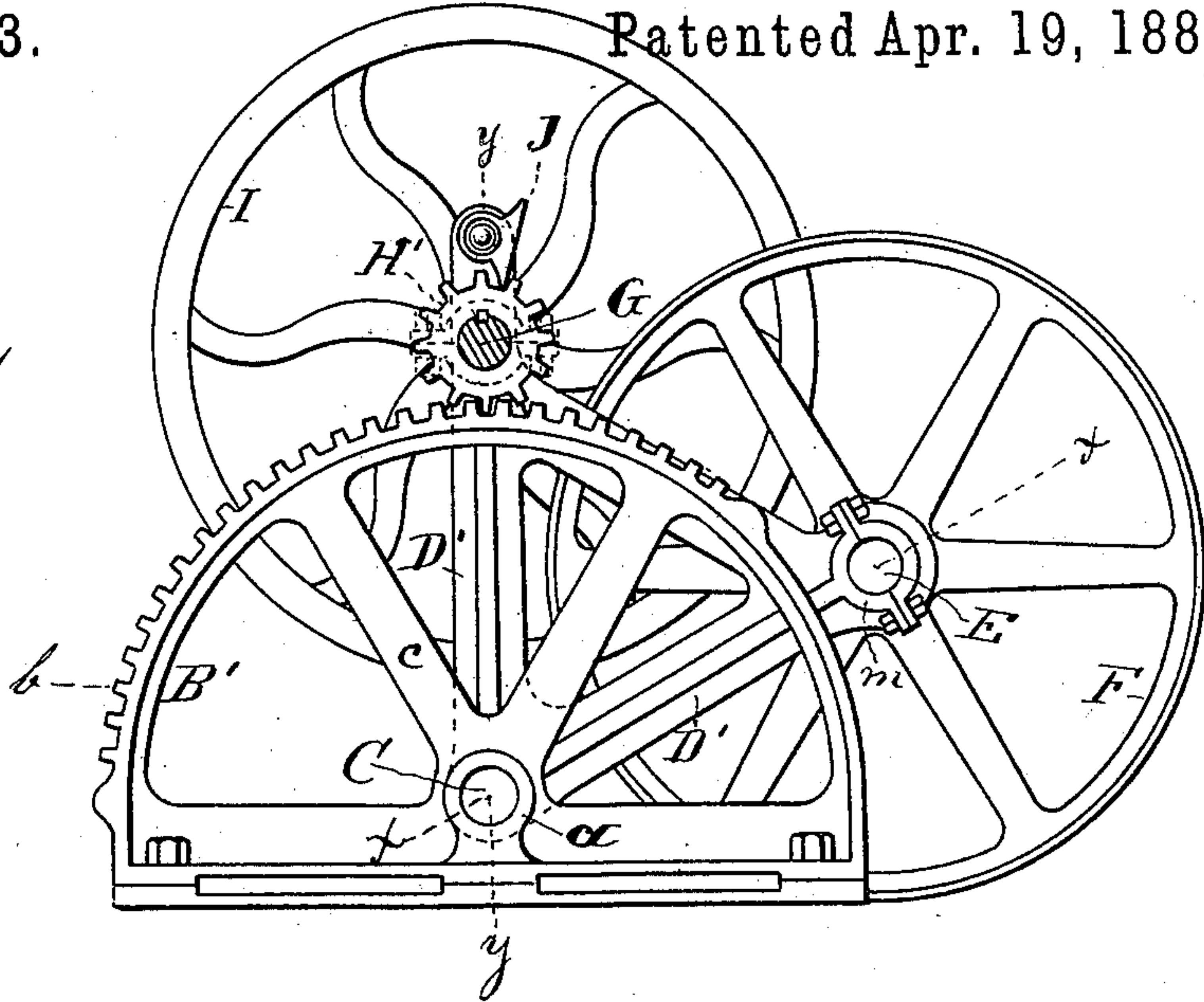
(No Model.)

C. G. LOTT.  
BELT TIGHTENER.

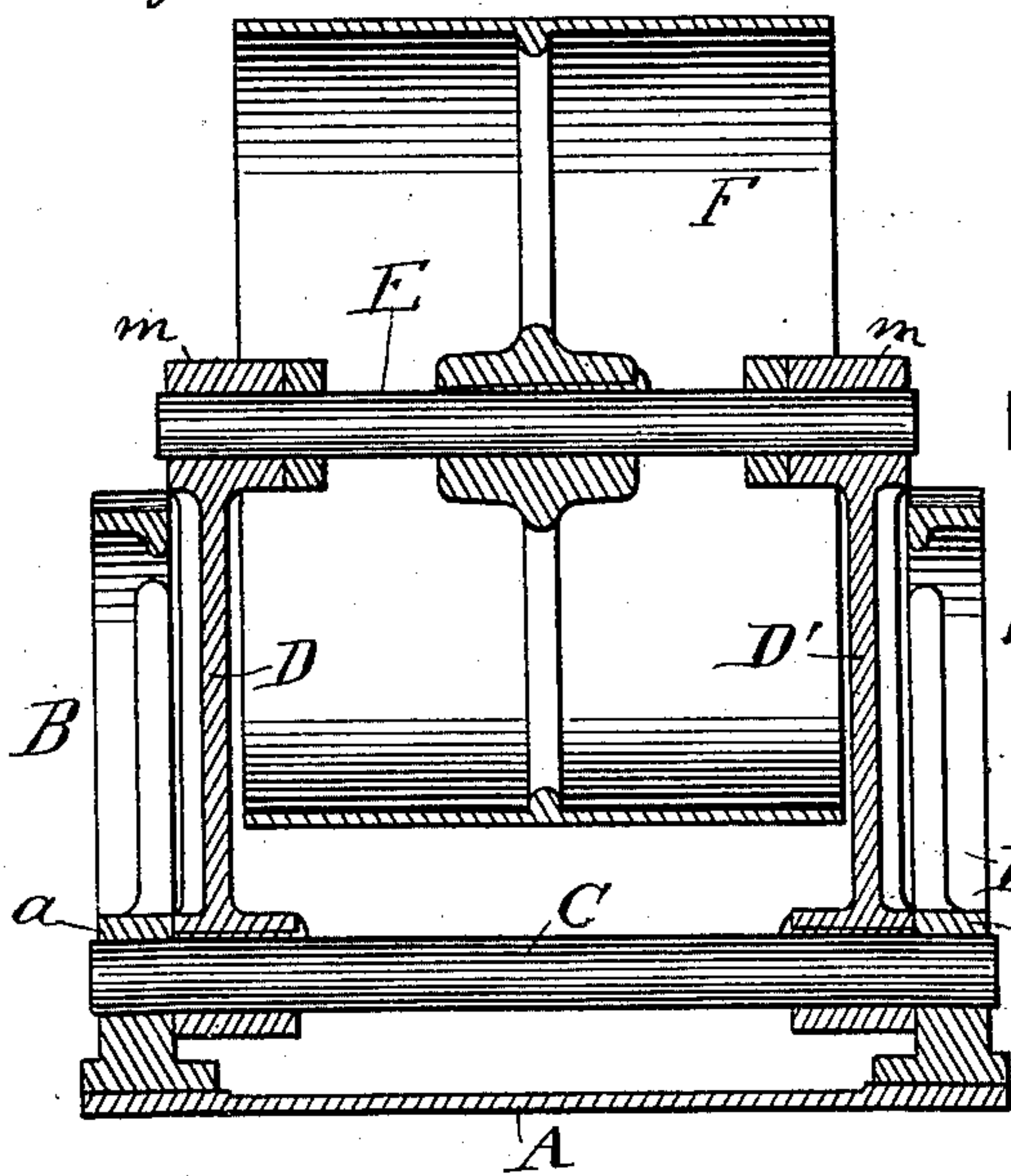
No. 361,303.

Patented Apr. 19, 1887.

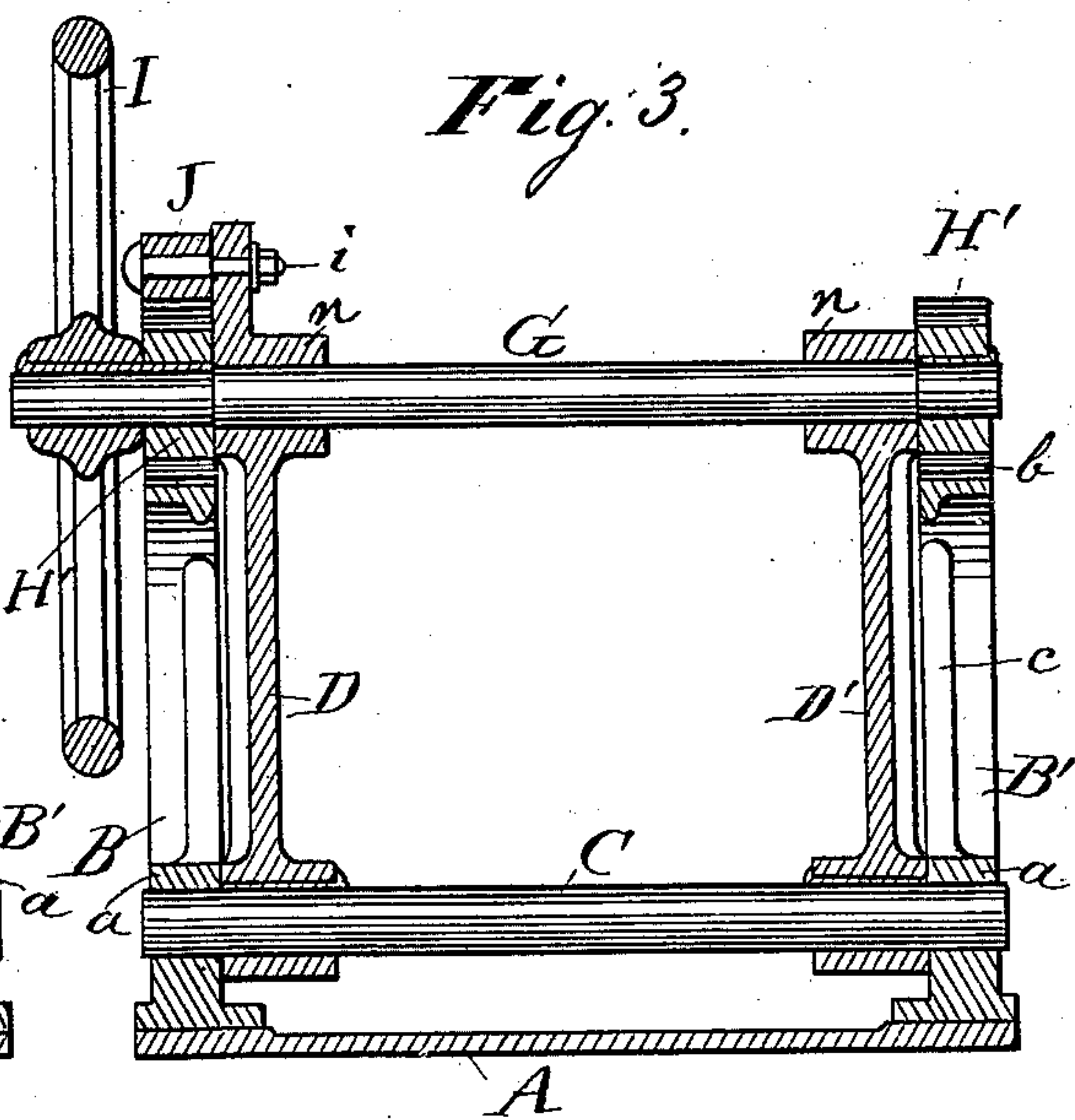
*Fig. 1*



*Fig. 2.*



*Fig. 3.*



WITNESSES:

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INVENTOR

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# UNITED STATES PATENT OFFICE.

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MANUFACTURING COMPANY, OF SAME PLACE.

## BELT-TIGHTENER.

SPECIFICATION forming part of Letters Patent No. 361,303, dated April 19, 1887.

Application filed November 30, 1886. Serial No. 220,317. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES G. LOTT, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Belt-Tighteners, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to pulleys applied for tightening belts for the purpose of increasing their frictional adhesion to the band-wheels over which such belts run, and more particularly to improvements of the arrangement described in my former application, (Serial No. 193,947, filed on March 4, 1886, and allowed on July 31, 1886,) patented December 21, 1886, No. 354,836, in which the pulley has been described and shown as running loose upon the shaft that carries the pinion and hand-wheel provided for adjusting the pulley. The manner of pivoting a pulley to be loose upon a fixed or stationary shaft, however, is objectionable, inasmuch as there is difficulty to lubricate while the pulley is in motion, and on account of the rattling noise caused by the wearing of the shaft and the bore of the pulley; and it is the object of this my invention to provide a device that will tend to increase the serviceability and general efficiency of the machine; and for that purpose it consists of the novel devices and combination of devices, hereinafter described and specifically claimed.

In the accompanying drawings, Figure 1 represents a side elevation of the tightener-pulley and frame; Fig. 2, a transverse section on line *x x* in Fig. 1, and Fig. 3 a similar section on line *y y* in Fig. 1.

Corresponding letters in the several figures of the drawings designate like parts.

A denotes the bed-plate, and B B' two semi-circular standards bolted upon such bed-plate and having gear-wheel teeth *b* to their rims.

C is a shaft pivoted in hubs *a*, formed in standards B B', central to the rim thereof. These standards B B' are shaped like segment-

gears, with arms C, which arms, however, are not essential and may be omitted.

Upon shaft C are rigidly mounted the hubs of two V-shaped castings, D and D', the radial arms of which are provided with journal-boxes *m* and *n*. In and between boxes *m* of castings D and D' is pivoted a shaft, E, upon which is rigidly mounted the pulley F, and in and between boxes *n* of castings D and D' is pivoted a shaft, G, upon the projecting ends of which are rigidly mounted two pinions, H and H', the teeth of which mesh with the teeth *b* of standards B and B', and exterior of pinion H' is rigidly mounted upon shaft G a hand-wheel, I, by which such shaft is being rotated.

To a radial extension of one of the arms of casting D, beyond box *n*, is pivotally secured by a bolt, *i*, a pawl, J, made so that it will engage the teeth of pinion H' when swung either way for locking such pinion, and thereby holding the castings D and D' with pulley F on any desired position.

This frame can be secured by bolts passed through its bed-plate A upon a floor, under a ceiling, against a wall, or to any frame-work to bring it in proper position relative to the belt to be tightened, when by hand-wheel I the pinions H and H' may be rotated in either direction for advancing or retracting the pulley, and can then be locked on any position by engaging pawl J with the pinion-teeth.

What I claim is—

In combination, bed-plate A and semicircular standards B B', having hubs *a* and gear-teeth *b*, castings D D', mounted upon shaft C, and provided with boxes for carrying shaft E, pulley F, shaft G, pinions H H', hand-wheel I, and pawl J, all substantially as described, to operate as specified.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES G. LOTT.

Witnesses:

WM. H. LOTZ,

OTTO LUBKERT.