

(No Model.)

W. C. MEYER.
FLOUR BOLTING REEL.

No. 338,858.

Patented Mar. 30, 1886.

FIG. 1.

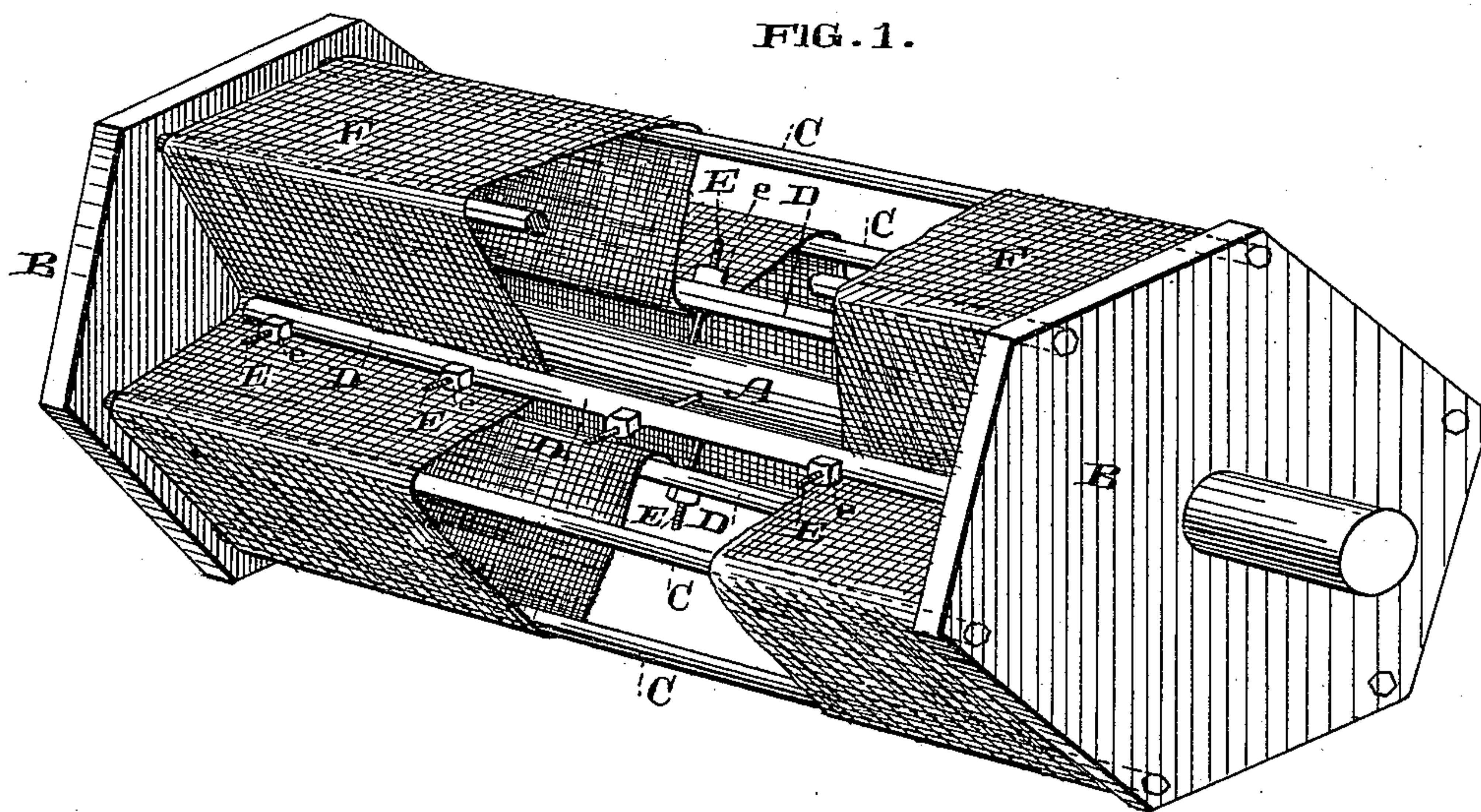


FIG. 2.

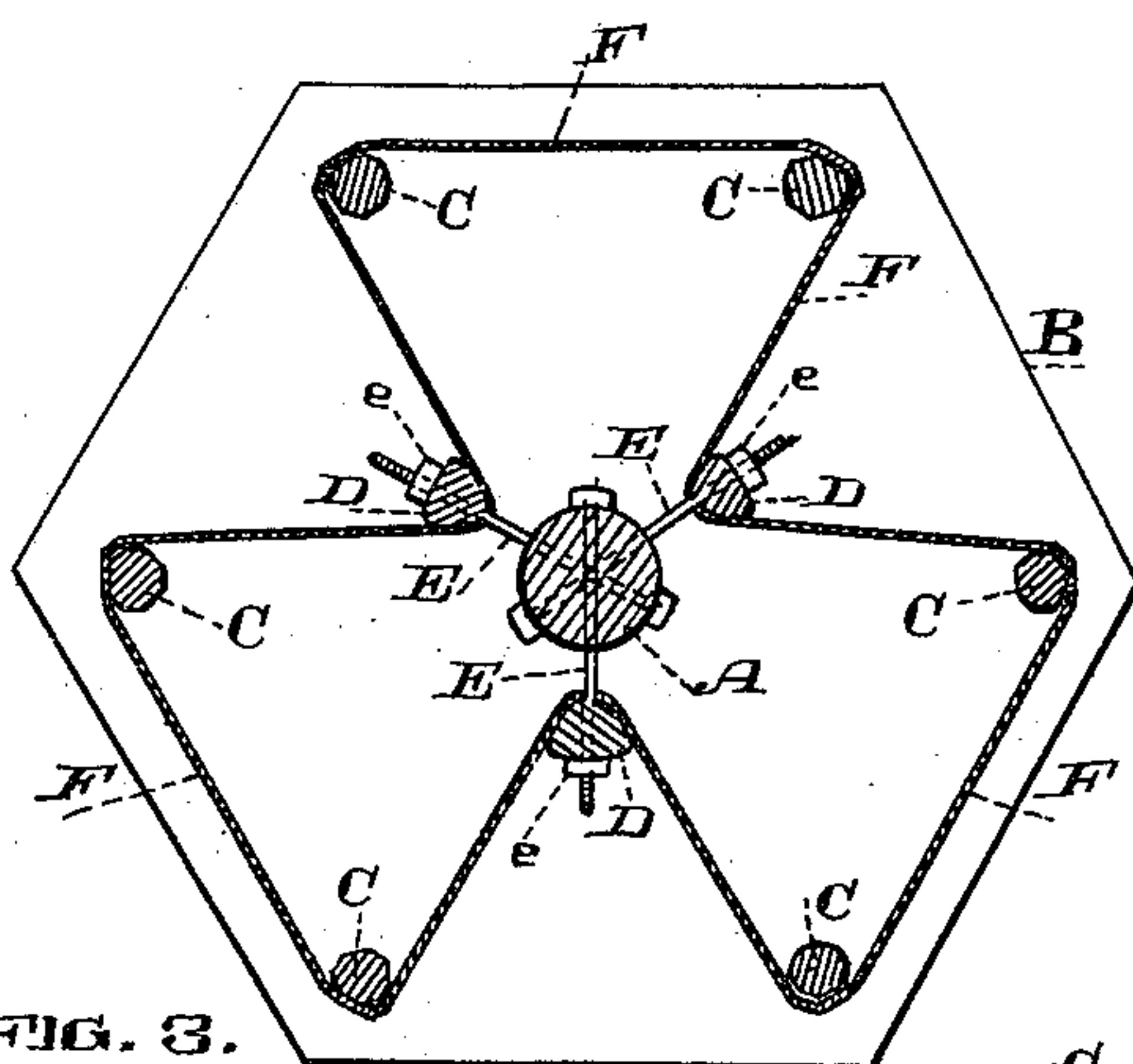
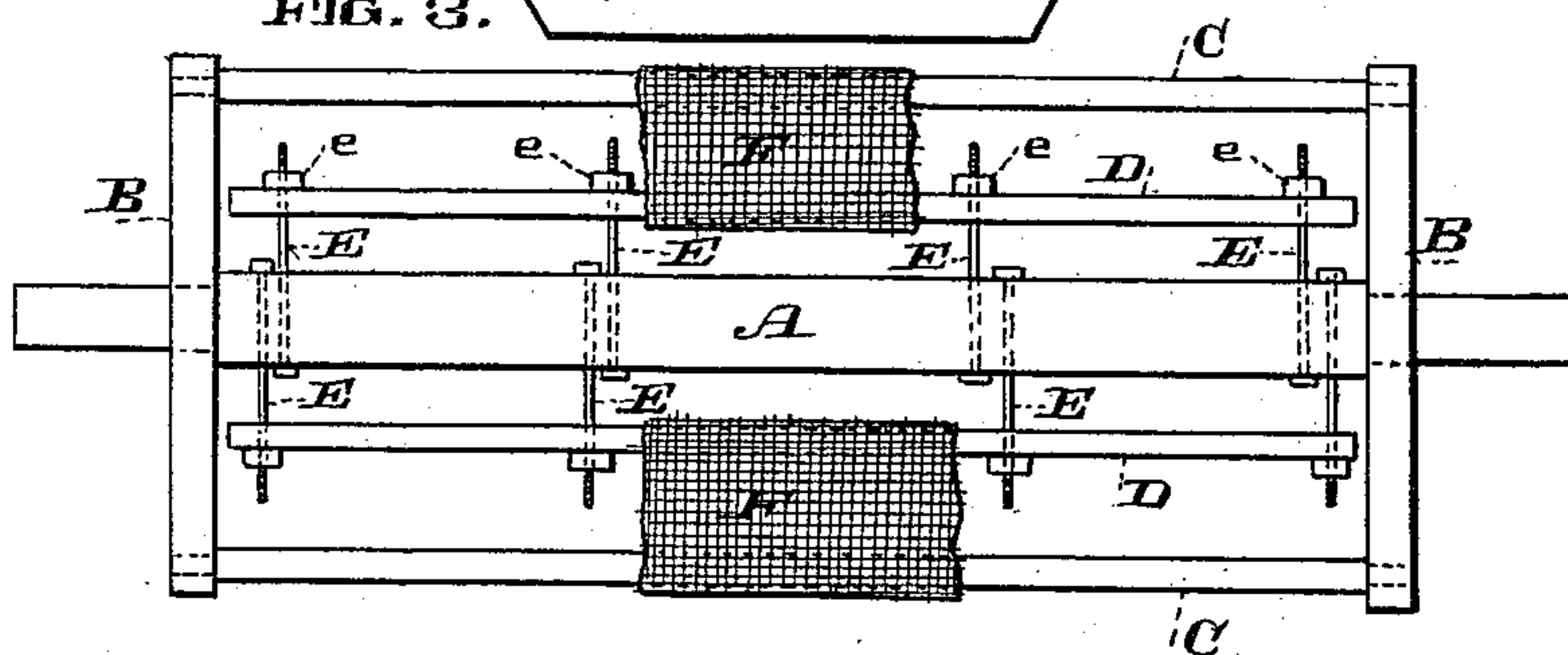


FIG. 3.



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UNITED STATES PATENT OFFICE.

WILLIAM C. MEYER, OF VALLEJO, CALIFORNIA.

FLOUR-BOLTING REEL.

SPECIFICATION forming part of Letters Patent No. 338,858, dated March 30, 1886.

Application filed November 17, 1885. Serial No. 183,140. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. MEYER, of Vallejo, county of Solano, and State of California, have invented an Improvement in Flour-Bolting Reels; and I hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to that class of flour-bolting reels in which a corrugated or uneven surface is employed; and my invention consists in the combination of devices which I shall hereinafter fully claim, and describe by reference to the accompanying drawings, in which—

Figure 1 is a perspective view of my reel, the center of the silk being broken away. Fig. 2 is a cross-section of same. Fig. 3 is a longitudinal section, a portion only of the silk being shown.

The object of my invention is to provide a reel which presents a large sifting-surface, and in which the agitation of the material is effected in a most perfect manner.

A is the axis or central shaft of the reel, which is to be mounted in any suitable manner adapting it to be rotated.

B are the heads of the reel, in one of which the customary feed-opening is made.

C is the outer series of ribs, the ends of which are firmly secured in the heads. These ribs all lie in a circle having the axis of the reel for a center.

D are the floating ribs, their ends not being connected with, though coming up to, the heads. These ribs are arranged in a circle concentric with that of the outer ribs, and are but half in number of the outer ribs, each floating rib forming the apex of an isosceles triangle, of which the two outer ribs form the angles at the base.

Through each of the floating ribs pass one or more bolts, E, which also pass radially through the axis A, and are headed therein. The outer ends of the bolts receive thumb-nuts *e*, by which the ribs may be adjusted to or from the center.

F is the silk or sifting fabric of the reel. This passes over the outer or fixed ribs and behind the inner or floating ribs, thus di-

viding the reel into a number of equal chambers communicating with the center.

It is obvious that by increasing the number of ribs the number of chambers may also be increased, though for all practical purposes I prefer to have three equal chambers, as I have shown in the drawings.

The inner or floating ribs lie in a circle, having a radius so proportioned to that of the circle in which the outer or fixed ribs lie that the sides of the chambers are not parallel, but converge toward a point beyond the center, and lying in a line extended through the center of the reel from the center of the base of the chamber. This makes the base of the chamber larger than its central opening, and gives a greater sifting-surface, both of base and sides, besides providing for a more perfect agitation of the material in affording more inclined surfaces.

By setting up the thumb-nuts *e* the silk may be always kept tight.

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

1. In a flour-bolting reel, the combination of the reel-heads, the shaft, an outer annular series of fixed ribs, an inner annular series of movable or adjustable ribs concentric with the outer series, a sifting-fabric supported on the ribs of the two series to form a number of centrally-opening chambers, and means for supporting the inner ribs from the shaft of the reel and adjusting them toward said shaft to tighten the sifting-fabric, substantially as herein described.

2. In a flour-bolting reel, the combination of the heads, the annular series of fixed ribs C, the annular series of movable or floating ribs D, the sifting-fabric F, supported upon the ribs and forming a number of centrally-opening chambers, the radial bolts E, headed in the shaft of the reel and carrying the ribs D, and the thumb-nuts *e* on said bolts, adapted to set up the ribs D and tighten the silk or sifting surface, substantially as described.

3. A flour-bolting reel comprising the shaft A, the heads B, the outer ribs, C, fixed in the

heads, the inner floating ribs, D, independent
of the heads, the radial bolts E, headed in
the axis A and carrying the ribs D, the
thumb-nuts e on the bolts, and the sifting-
5 fabric F, supported on the ribs C D and form-
ing a number of centrally-opening chambers,
substantially as described.

In witness whereof I have hereunto set my
hand.

WILLIAM C. MEYER.

Witnesses:

DAVID RUTHERFORD,
ABRAHAM WILZINSKI.