

A. J. TERRY.
Flour-Bolt.

No. 223,554.

Patented Jan. 13, 1880.

Fig. 1.

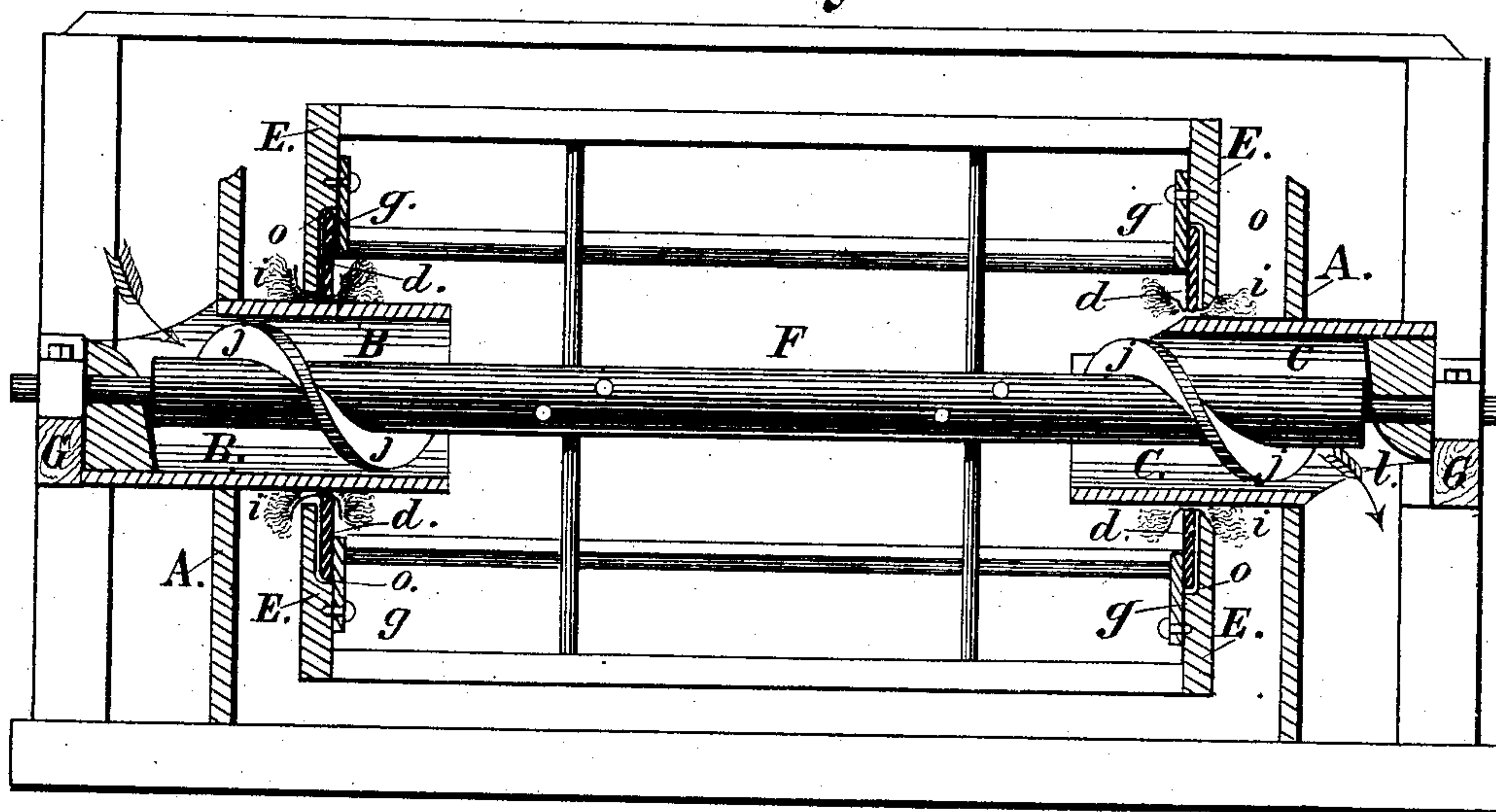
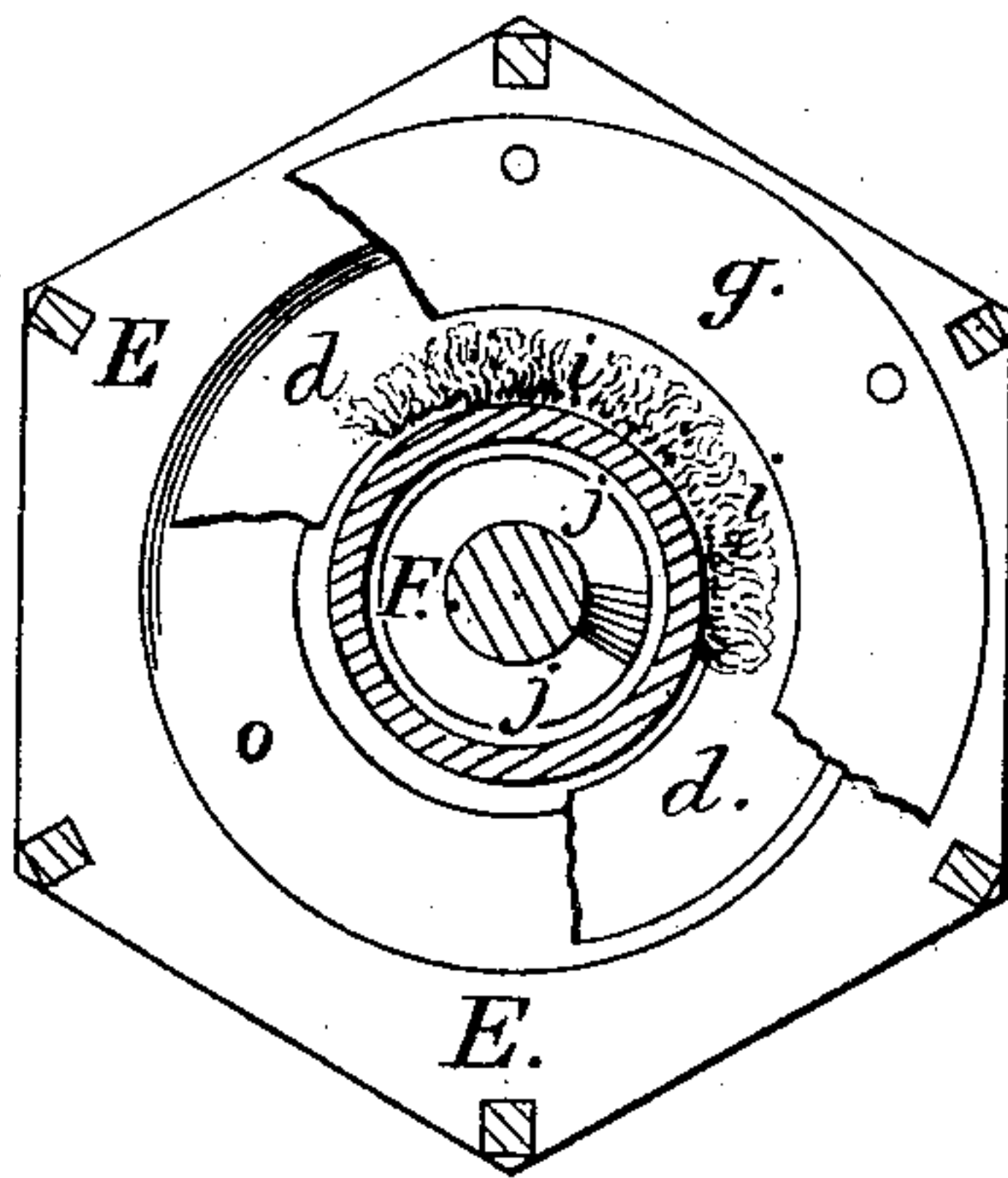


Fig. 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

ANDREW J. TERRY, OF SAN FRANCISCO, CALIFORNIA.

FLOUR-BOLT.

SPECIFICATION forming part of Letters Patent No. 223,554, dated January 13, 1880.

Application filed June 16, 1879.

To all whom it may concern:

Be it known that I, ANDREW J. TERRY, of the city and county of San Francisco, and State of California, have invented certain new and useful Improvements in Flour-Bolts; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the drawings accompanying this specification and forming a part of the same.

My invention has reference to certain improvements in flour-bolts; and it consists in combining with annular recesses in the reel-heads packing-holding annular disks fitting in aforesaid recesses and rings attached to said heads and fitted against the disks, substantially as hereinafter more fully set forth.

Referring to the accompanying drawings, Figure 1 is a longitudinal section of my improved flour-bolt, and Fig. 2 is a detached view of one of the reel-heads seen from the inside.

Let A A represent the ends of the hutch-box. B C are two short tubes, which are secured in the same line in the opposite ends of the box, so that they project both inside and outside of the box. Around each tube, inside of the box, is a flange, *d*, which fits in a groove, *o*, in the reel-heads, as hereinafter described.

The reel-heads E E have each a circular opening in its center, which is larger in diameter than the tubes B C, and smaller than the projecting flanges *d d*.

The reel-shaft F passes through the center of each of the tubes B C, and is supported in boxes on the outside cross-beam, G, of the hutch-box frame, while the heads E fit against the flanges *d* inside of the box.

A shallow recess, *o*, is made around the hole in each head E E on one side, and in this recess the edges of the flanges *d* will fit when the heads are pressed against them. A cap-ring, *g*, is then secured to the inside of the heads after the flange is in place, thus forming a groove in the edge of the circular opening in each end, in which the outer edges of the flanges move.

In securing the flanges *d* upon the tubes, I place a narrow piece of sheep-skin, *i*, under them, so that the long wool will project up

over the joint between the head and flange, both inside and outside of the reel-head, and thus prevent the flour from getting into the joint.

The object of the combination of the parts lettered *d g* with the recessed reel-heads is to provide a packing around the openings in the reel-heads, through which the conveyer and discharging-tubes pass. This arrangement of parts permits the ready and expeditious removal and replacement of the individual parts and of the additional packing *i*.

Around that portion of the reel-shaft F which passes through each of the tubes B C I secure a wide spiral flange, *j*, in the manner of constructing screw-conveyers.

The tube B forms the feed-conveyer for feeding the flour into the bolt. The outside end of this tube therefore is open on top, so that the flour can be delivered into it. The opposite tube, C, forms the discharge-conveyer for removing the tailings from the bolt. Its inner end is made open on top, so as to receive the tailings, while its outer end has an opening, *l*, on its under side, through which they are discharged.

I thus provide a very simple arrangement for automatically feeding flour into flour-bolts and discharging the tailings therefrom, and at the same time I keep all the joints tight without unnecessary friction.

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

In a flour-bolt, the combination, with the reel, whose heads E are provided on the inside with annular recesses *o o*, of the packing-holding annular disks *d*, fitting in the recesses *o* of the heads, and the rings *g*, attached to said heads and fitted against the disks *d d*, substantially as shown and described, for the purpose specified.

In witness whereof I have hereunto set my hand and seal.

ANDREW J. TERRY. [L. S.]

Witnesses:

W. FLOYD DUCKETT,
W. F. CLARK.