

(No Model.)

D. L. HAMAKER.

BOLTING REEL.

No. 384,520.

Patented June 12, 1888.

FIG. 1.

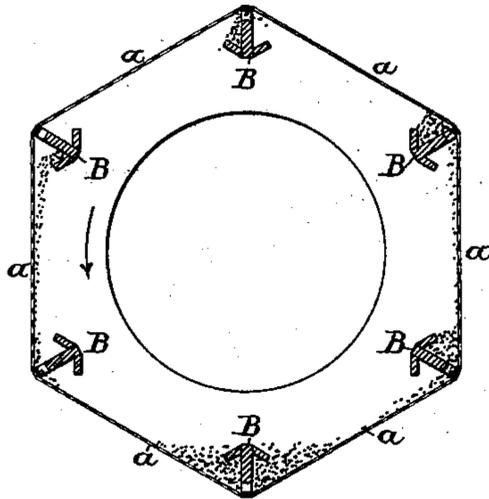


FIG. 3.

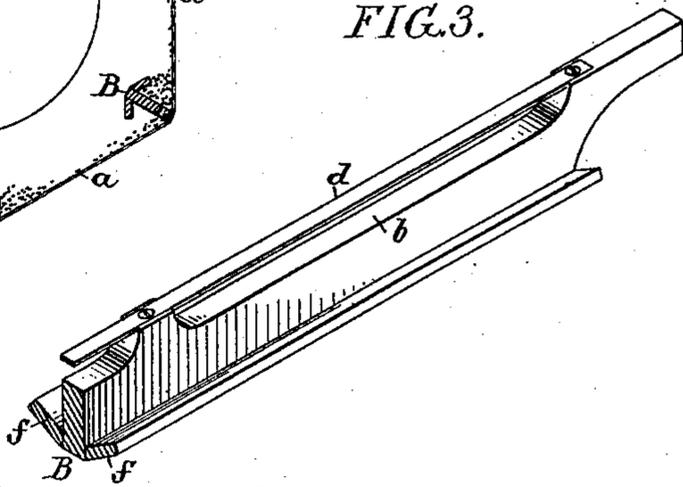
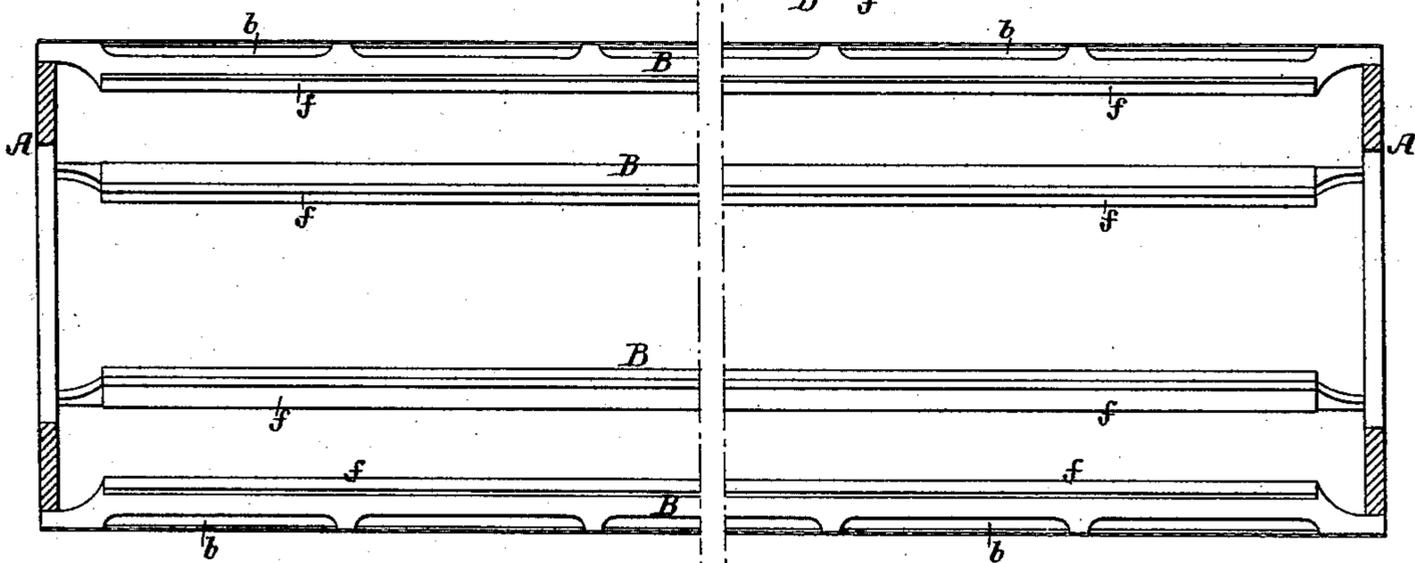


FIG. 2.



Witnesses.

David S. Williams.

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UNITED STATES PATENT OFFICE.

DAVID L. HAMAKER, OF CHAMBERSBURG, PENNSYLVANIA.

BOLTING-REEL.

SPECIFICATION forming part of Letters Patent No. 384,520, dated June 12, 1888.

Application filed August 25, 1887. Serial No. 247,834. (No model.)

To all whom it may concern:

Be it known that I, DAVID L. HAMAKER, a citizen of the United States, and a resident of Chambersburg, Franklin county, Pennsylvania, have invented certain Improvements in Bolting-Reels, of which the following is a specification.

My invention relates to that class of polygonal bolting-reels in which the longitudinal ribs of the reel have projecting ribs at their inner edges, so as to form pockets for receiving chop on the ascending side of the reel and carrying it over to the descending side, the object of my invention being to so construct the bar and its wings that the chop will be retained in its pocket until such time as it can be discharged to the best advantage.

In the accompanying drawings, Figure 1 is a transverse section of a six-sided reel constructed in accordance with my invention. Fig. 2 is a longitudinal section of the same; and Fig. 3 is a perspective view, on a larger scale, of part of one of the longitudinal ribs of the reel.

A A represent the opposite heads of the reel, and B the longitudinal ribs connecting the same and supporting the bolting-cloth *e*, with which the reel is covered.

Each rib has in its inner edge a recess, *b*, a bar, *d*, bridging these recesses and providing for the proper support of the bolting-cloth from end to end of the reel, and on the inner edge of each rib are two inclined wings, *f f*, projecting in opposite directions from the rib and outward toward the bolting-cloth, as shown in Figs. 1 and 3. The wings project from the rib at angles considerably less than a right angle; hence, as the reel rotates in the direction of the arrow, the wing on the advancing side of the rib forms with said rib a V-shaped trough, which gathers a quantity of chop from the bottom of the reel and carries it up on the ascending side of the reel and over to the opposite or downgoing side of the reel, where the chop is delivered from the trough onto the bolting-cloth, as shown in Fig. 1, the V shape of the trough insuring the retention of the chop therein until said trough has been carried around considerably beyond the cen-

ter line of the reel, so that that side of the reel immediately in advance of the trough will have assumed a vertical position, as shown in Fig. 1, before the main body of the chop is delivered from the trough, the chop being delivered directly onto the cloth in advance of the trough, whereby said chop is not thrown into forcible contact with the bolting-cloth on the descending side of the reel, but is allowed to flow smoothly and evenly over the same; hence the fine impurities are not forced through the meshes of the cloth with the flour.

By the use of the two wings *f f*, I am enabled to run the reel in either direction with like results; but when the reel is only intended to run in one direction one of the wings may be dispensed with. The recesses *b* in the outer edges of the ribs permit the free flow down the cloth on the ascending side of the reel of the chop which has been carried up by said cloth; hence the bolting action of the ascending side of the reel is in no wise restricted.

I am aware that reel-bars with such recesses in their outer edges are not new, and also that reel-bars have been provided with projecting wings on their inner edges, so as to form lifting pockets; but I am not aware that the longitudinal bars of the reel have been provided with wings projecting therefrom at an angle less than a right angle, so as to form V-shaped pockets, which retain the chop until it has reached the most effective point of discharge on the descending side of the reel.

I am also aware that reel-bars having hooked inner ends have been proposed in connection with a circular reel; but in this case the point of discharge from the bucket formed by the hooked inner end of the bar is so far from the cloth that the chop strikes the latter with force, whereas in a polygonal reel the pocket discharges so closely to the cloth that the chop flows smoothly and evenly thereupon, and there is no abrupt fall from the pocket onto the cloth.

I therefore claim as my invention and desire to secure by Letters Patent—

The combination, in a polygonal bolting-

reel, of the longitudinal ribs of the reel lo-
cated at the angles of the latter and having
recesses formed in their outer edges, with
wings projecting from the inner ends of the
5 ribs toward the bolting-cloth at an angle less
than a right angle, so as to form V-shaped
lifting-pockets, all substantially as specified.

In testimony whereof I have signed my name
to this specification in the presence of two
subscribing witnesses.

DAVID L. HAMAKER.

Witnesses:

WILLIAM STAKE,
H. E. A. KEISER.