M. BUCK.

BOLTING REEL.

No. 186,537. Patented Jan. 23, 1877.

Fig. 1.

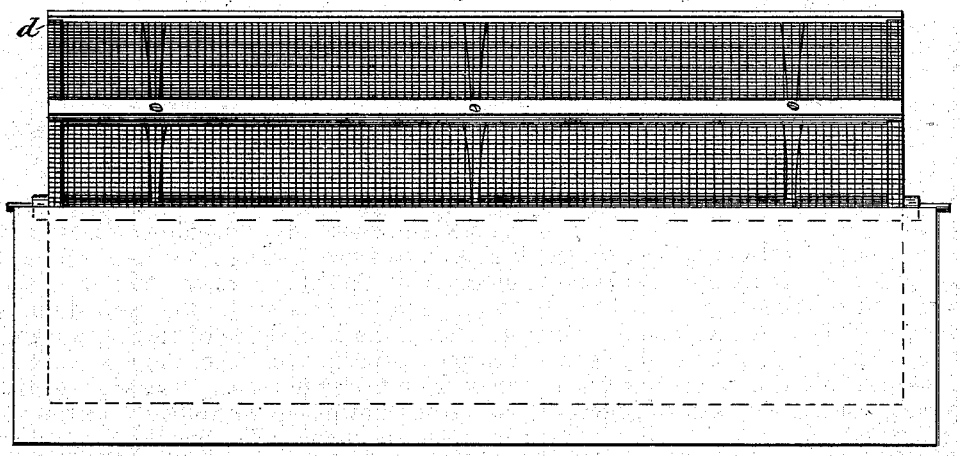
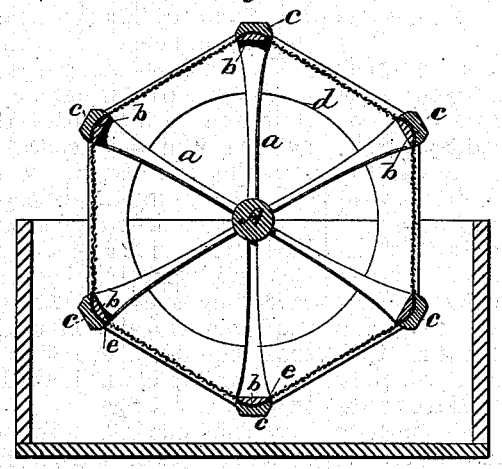


Fig. 2.



Witnesses.
Granville Lewis.
M. Schenck.

Inventor.
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His Attys.

UNITED STATES PATENT OFFICE.

MARTIN BUCK, OF HILLSBOROUGH, OHIO.

IMPROVEMENT IN BOLTING-REELS.

Specification forming part of Letters Patent No. **186,537**, dated January 23, 1877; application filed October 12, 1876.

To all whom it may concern:

Be it known that I, MARTIN BUCK, of Hillsborough, in the county of Highland and State of Ohio, have invented a new and useful Improvement in Bolting-Reel; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming part of this specification.

My invention is an improvement in bolting-reels, relating more particularly to the manner of connecting the cloth to the reel.

In reels of this class it is desirable to avoid all obstructions on the inside of the reel, by which the free sliding motion of the flour would be hindered in the revolution of the apparatus. To accomplish this, as well as to facilitate the putting on of the cloth, and to leave no space for insects, or any hard substance between the cloth and the ribs, is the object of my invention.

In Figure 1 of the drawing, *a a* represent arms fixed to a shaft, A, and arranged in the usual manner, except that they are flat or oval, and are placed with the edge at right angles to the axis, in order to present the least possible surface. On the outer ends of these radial arms are fastened the ribs *b b*. These ribs are made in the form shown in section in Fig. 2. The outer surface is convex and the inner surface plain, and at right angles to the arms. These constitute the inner part of the ribs. Over each of these is fitted an outer part, *c*, the under surface of which is made concave to correspond with the convex surface of the inner rib. The convex surface of *b* is made on a very much smaller radius than that of the reel, and the outer rib is made wider than the inner, and, allowance being made for the interposed fabric, its edges must be such as to bring the cloth down flush with the inner surface of the rib *b*. The parts being so constructed, and the inner ribs *b b* being in place on the ends of the arms, the cloth is placed over these inner ribs, being supported thereby and by the ends *d d* of the reel. As the rib *b* is formed on a short curve, the cloth touches only at one line, as shown at *x*, Fig. 3, and leaves spaces between itself and the edges of the rib. I then place over the cloth, where it thus lies on the curved outer surfaces of the ribs, strips of ticking *e e*, and then put in place over them the ribs *c c* and screw them firmly in place. The edges of the ribs *c* bring down the cloth flush with the inner surface of the ribs *b b*, thereby stretching the cloth, and also leaving the whole inner surface of the reel unobstructed. This is clearly shown at *e*, Fig. 2. Care must be taken in adapting the outer part of the rib to the curve that the edges of the outer shall be such as to bring the cloth down flush and close to the inner surface. In this way also there is left no space between the ribs, and the cloth is held securely in place by very simple and cheap constructions. The strips being clamped, there is no need that the ticking should be sewed to the cloth.

The inner surface of the rib, which is shown as flat in the drawing, may be made concave, if desired. I have made them in both forms, and find that when concave the flour slides as smoothly over the ribs as over the cloth itself.

I claim as my invention—

1. In a bolting-reel, the combination of an inner rib having a convex outer surface of the cloth stretched thereupon, and of an outer cap extending substantially the entire length of the inner rib, and of slightly greater width than the said inner rib, so that when applied it brings the cloth down flush with the inner surface, as set forth.

2. The inner rib *b* formed with a convex outer surface of smaller radius than that of the reel, in combination with an outer cap made to fit the inner, and draw down and stretch the cloth, as set forth.

3. The combination of the ribs *b* and *c*, with the cloth and the interposed strips *e*, as set forth.

MARTIN BUCK.

Witnesses:

GEORGE E. EASTON,

JACOB MERKLE.