

(No Model.)

W. GILLELAND.
FLOUR BOLTING REEL.

No. 378,785.

Patented Feb. 28, 1888.

Fig. 1.

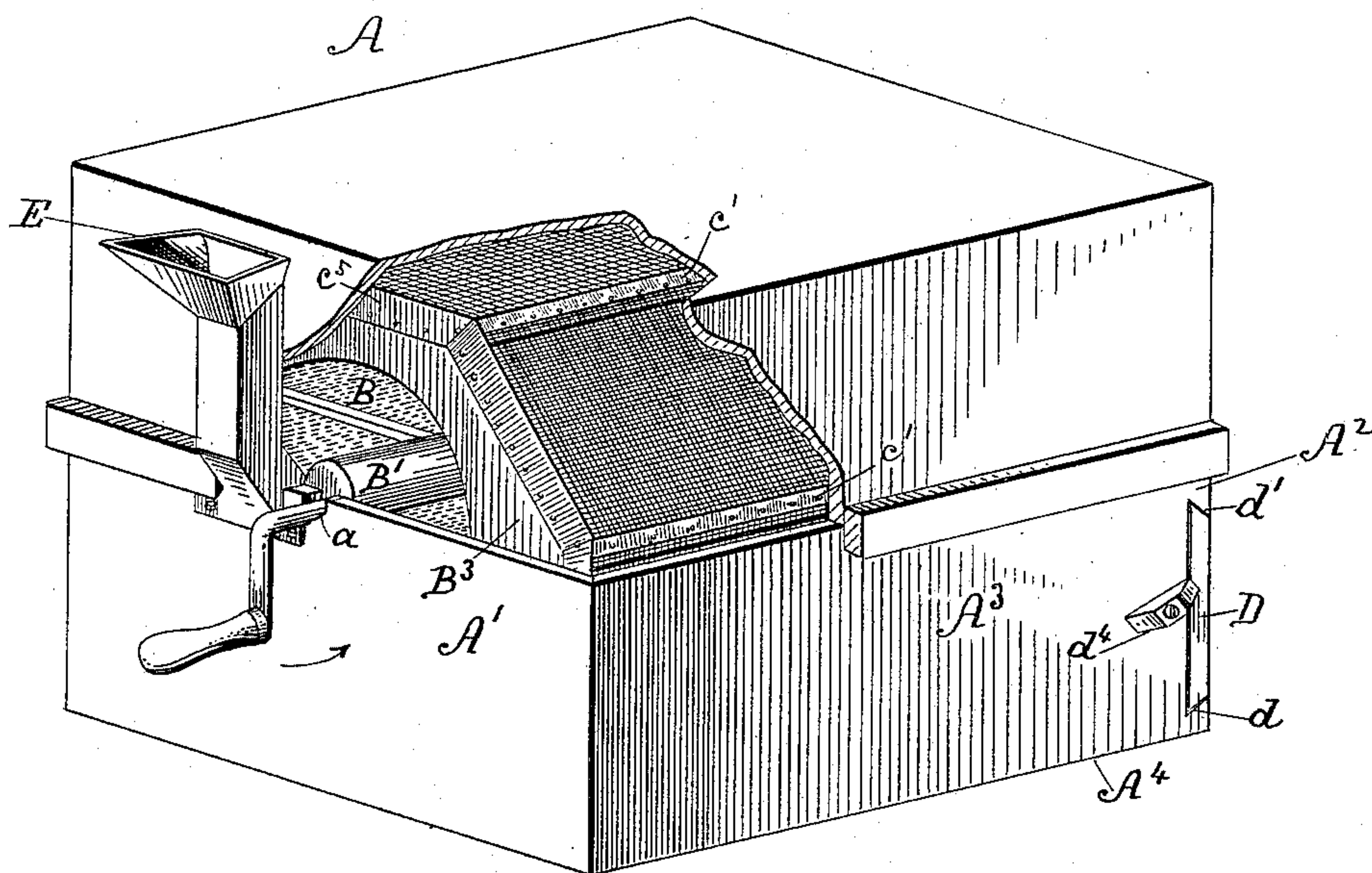


Fig. 2.

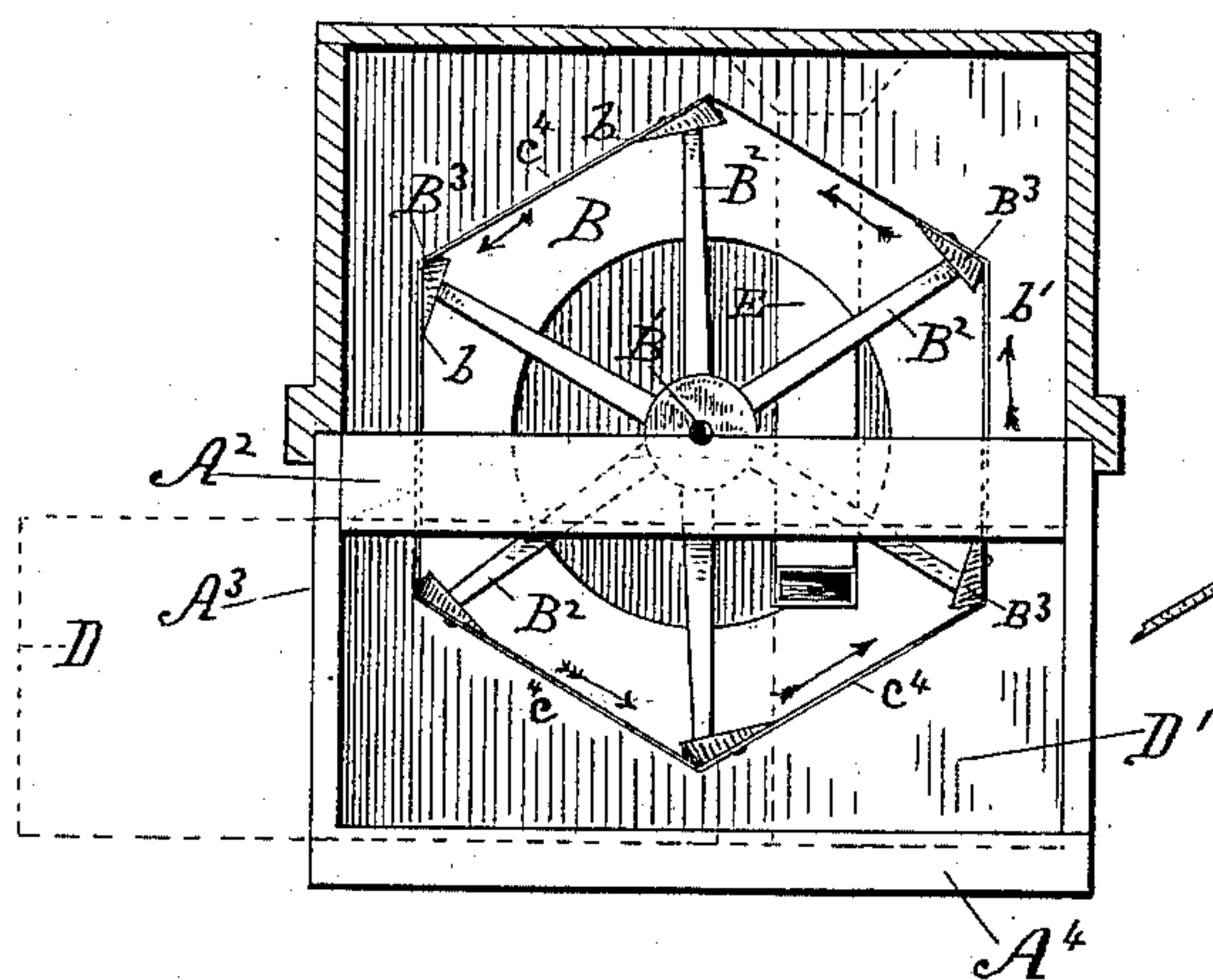
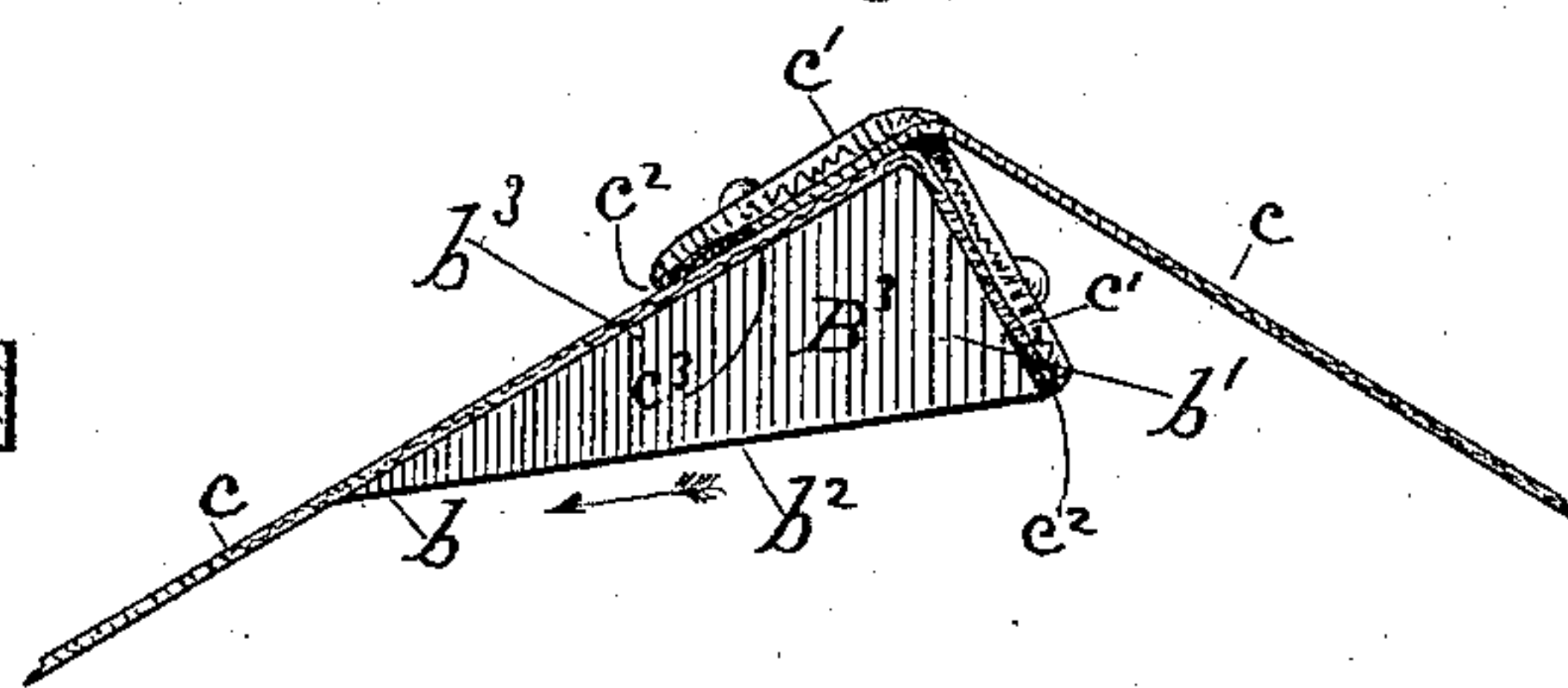


Fig. 3.



WITNESSES:

Fred G. Dieterich.
John Kemon.

INVENTOR:

W. Gilbeand.
BY Munn & L
ATTORNEYS.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

WASHINGTON GILLELAND, OF LAND, GEORGIA.

FLOUR-BOLTING REEL.

SPECIFICATION forming part of Letters Patent No. 378,785, dated February 28, 1888.

Application filed July 8, 1887. Serial No. 243,794. (No model.)

To all whom it may concern:

Be it known that I, WASHINGTON GILLELAND, of Land, in the county of Hall and State of Georgia, have invented a new and useful Improvement in Flour-Bolting Reels, of which the following is a specification.

My invention consists in a construction and combination of parts whereby the sections of the bolting-cloth are secured to the reel-frame in an improved manner, as hereinafter described and claimed with reference to the accompanying drawings, in which—

Figure 1 is a perspective of my invention with one corner of the casing broken away; Fig. 2, a vertical transverse section of the same; and Fig. 3 an enlarged section through one of the ribs, showing the mode of attaching the bolting-cloth thereto.

The bolting chest A is a rectangular box, herein shown as divided horizontally in the axis of the reel B, one end of said reel-shaft B' being supported in a bearing, *a*, at the head A' of the bolting-chest, and the other end of said reel-axis being supported at the tail end of the said bolting-chest. In practice the axis of the reel is inclined at about three-quarters of an inch to the foot, or about one-half the inclination usually employed. To the reel shaft or axis B' are secured radial arms B² at or near the ends of the reel, upon the ends of which are secured longitudinal ribs B³, of triangular cross-section, with the apex or edged portion *b* in advance of the thicker portion *b'*, the longer sides *b*² and *b*³ being placed, respectively, toward the inner and outer sides of the reel. The cloth C is stretched to fit tightly between the ribs and drawn lengthwise and sidewise until all of the meshes of the cloth are square with the sections or sides of the reel, and is put on in six pieces, with ticking *c'* sewed on every edge, and the edges *c*² of the cloth turned or tucked under, to overlay the tuck of one with the tuck of the adjoining strip, and each strip or section is separately tacked down at the center of the tucks and ribs to snugly fit the outside of the said reel-ribs and be securely held thereon.

The inner layer of cloth, *c*³, is glued down to the outer surface of the rib when it is being stretched and tacked, and will fit close up to the feather edge or advance edge of the rib, thus permitting the flour to slide smoothly

over the ribs and joints formed with them and the bolting-cloth on to the next succeeding cloth, without being carried up by the ribs and allowed to fall abruptly from one part of the reel to the other. The edges *c*⁴ of the cloths at the tail end of the reel are hemmed with double seams, and the edges *c*⁵ at the head of the reel are folded over the end piece, B³, and tacked securely thereto.

A spout, E, at the head of the reel supplies the material to the bolt, and the tailings from the reel are discharged through an opening, D', covered by a slide, D, fitted in horizontal parallel grooves *d d'*, formed at the lower and tail end of the bolting-chest. The slide D is fitted in guides from the side of the bolting-chest, to extend across the same and be held in place by a button or bolt, *d*⁴, at one side, A⁵, of the chest, and by the guide-grooves *d d'* in the walls of the chest. By withdrawing the slide D the interior of the chest may be reached when required.

The reel being placed on a gradual pitch, the ribs being tapered and closely glued down and secured to the bolting-cloth at the forward angular edge, to slide beneath the material and allow it to pass smoothly over the inner surface of the bolting-cloth with but a slight ripple as it passes over the ribs upon the inner side of the bolting-cloth, the reel will work faster and the flour will be bolted cleaner and freer from specks than in devices adapted to move the material rapidly over the surface of the bolting-reel and toss it about roughly within the interior of the reel.

These sections of bolting-cloth may be removed separately from the reel for repair or replacement without disturbing the other sections.

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

The combination, with the reel-frame having ribs B³, which are triangular in cross-section, of the sections *c* of bolting-cloth, one edge of each such section being glued to the edge of the outer side, *b*³, and nailed on the other side, *b'*, of a rib, B³, and the edge of the next section *c* overlapping the former and being nailed to the other angular side, *b*³, of the same rib, all as shown and described.

WASHINGTON GILLELAND.

Witnesses:

R. R. GARDNER,
A. R. SMITH.