

A. L. WILLIAMS.  
Flour Bolting Reel.

No. 111,290.

Patented Jan. 24, 1871.

Fig. 1.

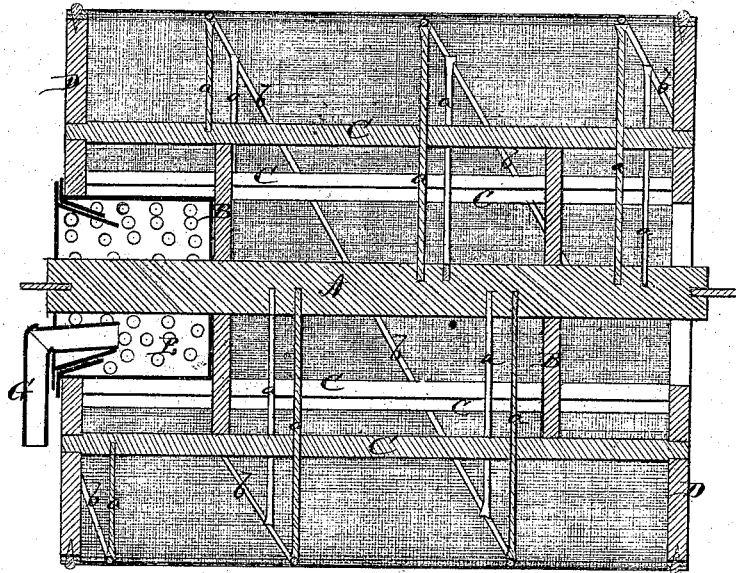
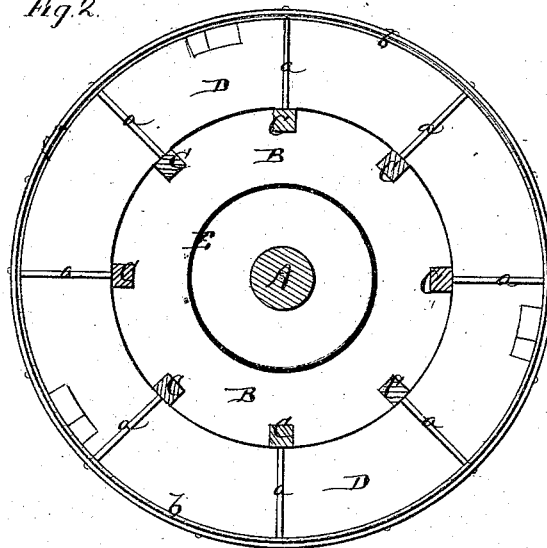


Fig. 2.



Witnesses.  
J. Hutchinson  
C. L. Evert.

Inventor.  
Allison L. Williams  
per  
Alexander Massey  
Attor.

# United States Patent Office.

ALLISON L. WILLIAMS, OF ORTH, INDIANA.

Letters Patent No. 111,290, dated January 24, 1871.

## IMPROVEMENT IN FLOUR-BOLTING REELS.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern :*

Be it known that I, ALLISON L. WILLIAMS, of Orth, in the county of Montgomery and in the State of Indiana, have invented certain new and useful Improvements in Flour-bolting Reel; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of a "flour-bolting reel," as will be hereinafter fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a longitudinal vertical section, and Figure 2, a transverse vertical section of my bolt-reel.

A represents the reel-shaft, upon which are placed two disks, B B, one a suitable distance from each end, as shown in fig. 1.

In the outer edges of the disks B B is inserted a series of ribs, C C, running parallel with the shaft A, and extending any desired distance beyond the disks.

On the ends of the ribs C C are placed the heads D D of the reel, said heads being of the proper size for the size of the bolt required.

Through the ribs C C, and into shaft A, passes a series of wires or rods, *a a*, the outer ends of which are forked, and on a line with the outer edges of the heads D D.

These wires or rods *a a* are set in spiral form, and in their forked outer ends is laid a wire, *b*, one end of which is attached to one head and the other end to

the other head, thus forming a spiral reel, around which the bolting-cloth is stretched.

The advantages of this arrangement are readily seen by those acquainted with milling. There is no obstruction to the flour; it slides right along on the cloth, and, by actual experiment, I have found that I can run a mill-bolt constructed in this manner at twice the usual speed, and make twice the amount of flour in the same time, and of a better quality, as there will be no specks in it.

Inside, attached to the reel, is a perforated revolving cylinder, E, at the upper or head end of the bolt. I also intend to use a stationary cylinder inside of the chest.

The flour is brought direct from the bur-spout by a draught of air up through the tube G, blowing into outer cylinder, through into the revolving cylinder, and through the perforations in the same onto the cloth.

Having thus fully described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the shaft A, disks B, ribs C, heads D, rods *a*, and wire *b*, constructed and arranged as described, to form a mill-bolt reel, substantially as herein set forth.

2. In combination with a mill-bolt reel, constructed as herein described, the perforated cylinder E and tube G, as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 8th day of November, 1870.

ALLISON L. WILLIAMS.

Witnesses:

JAMES L. McQUOWN.

R. J. DODD.