(No Model.)

R. WILSON.

MEAL BOLT.

No. 262,527. Patented Aug. 8, 1882.

Fig. 3.

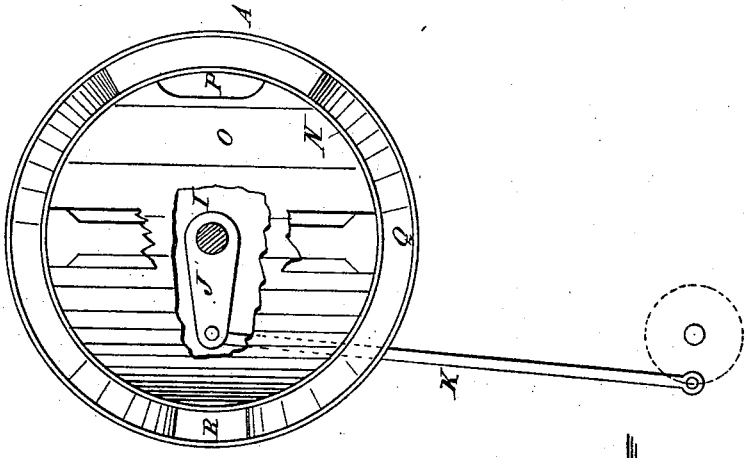


Fig. 2.

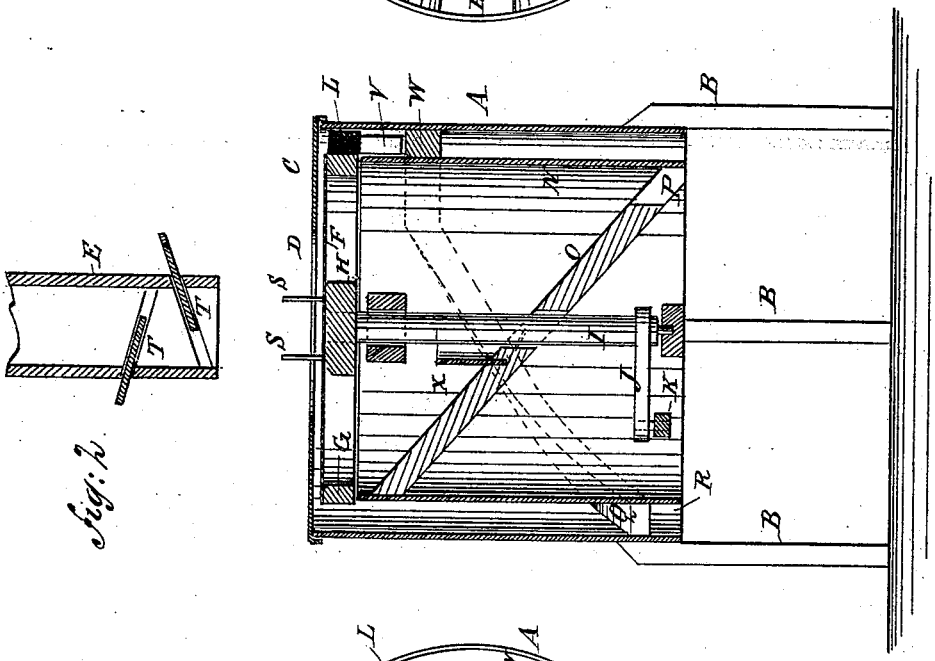
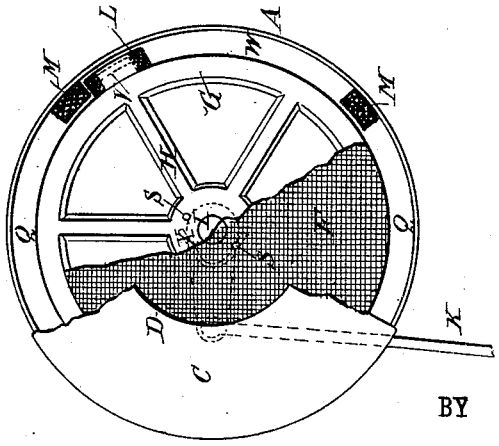


Fig. 1.



WITNESSES:

Chas. Nisa.

C. Sedgwick

INVENTOR:

R. Wilson

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

ROBERT WILSON, OF GREENUP, KENTUCKY.

MEAL-BOLT.

SPECIFICATION forming part of Letters Patent No. 262,527, dated August 8, 1882.

Application filed April 18, 1882. (No model.)

To all whom it may concern:

Be it known that I, ROBERT WILSON, of Greenup, in the county of Greenup and State of Kentucky, have invented a new and Improved Meal-Bolt, of which the following is a full, clear, and exact description.

My invention relates to bolts for sifting meal in which circular bolting-disks oscillate on a vertical axis within a cylindrical casing having an inner casing and delivery-chutes, and suitably provided with spring-bumpers for easing the movement, and other appliances, as more fully hereinafter described.

Figure 1 of the accompanying drawings is partly a top view and partly a horizontal section of the bolt. Fig. 2 is a vertical section of the bolt, also of the spout for discharging the meal into the bolt; and Fig. 3 is a plan of the bolt inverted and with a part broken out.

A represents the case, which is of sheet metal, of cylindrical form, and standing upright on legs B.

C is a cover to the top of the case, with an opening at the center D for the discharge of the meal into the bolt from the spout E.

F is the disk, of wire-gauze or other bolting material. It is mounted in the upper part of the case, a little below the top, on a horizontal wheel-frame, G H, attached to the upper end of the vertical shaft I, to which power is applied for working the bolt by the crank J and connecting-rod K.

L represents a spring, of rubber or other approved material, attached to the periphery of frame G H and working between the two buffer-springs M, attached to the case for knockers to prevent the meal from clogging on the bolt. The meal falls through the bolt within the inner cylinder, N, upon the chute O, from which it escapes at P. The bran discharges over the rim of wheel-frame G H into the space between case A and cylinder N and escapes by the spiral chutes Q at R. The top of the bolt has a couple of stud-pins, S, to assist in spreading the meal falling at the center from the spout and preventing the meal from lodging and piling up to the spout. Said pins S may extend up into the spout to prevent it from clogging.

T represents a couple of inclined slides, arranged in the spout, so as to receive the meal and discharge it gently upon the bolt, and thus prevent it from packing and clogging thereon by falling heavily.

In order to make the chutes Q steep and prevent the bran from clogging on them, part of the rim or partition between the two cylinders forming said chute is made flat for a length equal to the sweep of the disk in its vibrations, and a scraper, V, is attached to the wheel-frame over said flat part W to scrape off the bran and dischage it onto the inclines Q.

X is a guard in the chute O around the hole through said chute for the shaft, to prevent escape of the bolted meal at the aperture around the shaft.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination of the bolting-disk F, the oscillating wheel-frame G H, the vertical cylindrical case A, the inner cylinder, N, and the chutes O and Q, as shown and described.

2. The combination of the oscillating bolting-disk F, the spring-bumper L, mounted thereon, and the fixed bumpers M, as shown and described.

3. The combination, with the scraper V, wheel-frame G H, bolting-disk F, and the flat portion W, of the chutes Q, as shown and described.

4. The combination, with the disk F and hub H, oscillating about a vertical axis, and the spout E over said axis, of the pins S, fixed in the hub H and oscillating in the line of delivery of the spout E, for spreading the meal radially upon the disk, as shown and described.

5. The combination of slides T and spout E with the oscillating bolting-disk F, substantially as described.

ROBERT WILSON.

Witnesses:
JOSEPH B. BURNETT,
SUMMERFIELD REED.