

E. SLAGLE & J. M. GRAHAM.

FLOUR AND MEAL-BOLT.

No. 173,074.

Patented Feb. 1, 1876.

Fig. 2.

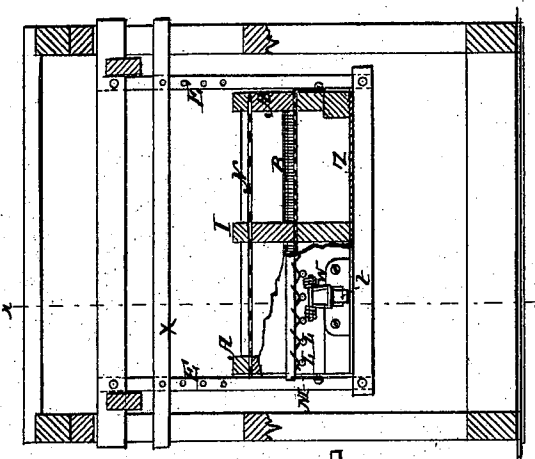


Fig. 4.

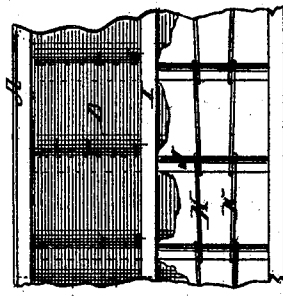


Fig. 1.

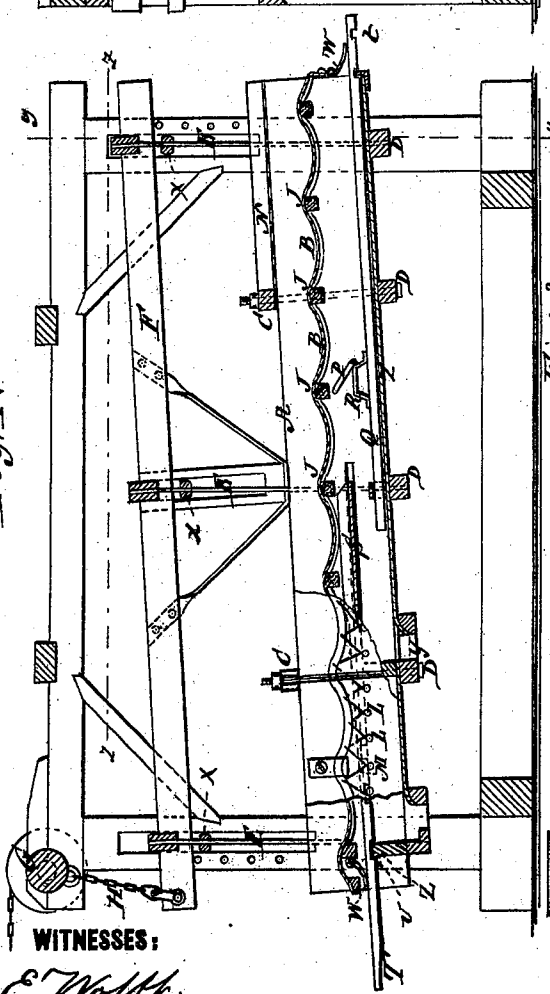
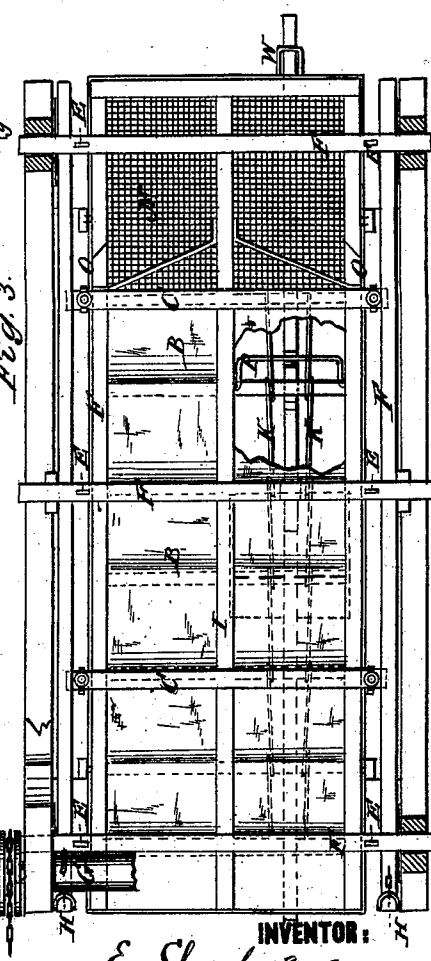


Fig. 3.



WITNESSES:

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EDWIN SLAGLE AND JOHN M. GRAHAM, OF ALBANY, MISSOURI.

IMPROVEMENT IN FLOUR AND MEAL BOLTS.

Specification forming part of Letters Patent No. **173,074**, dated February 1, 1876; application filed September 17, 1875.

To all whom it may concern:

Be it known that we, EDWIN SLAGLE and JOHN M. GRAHAM, of Albany, in the county of Gentry and State of Missouri, have invented a new and Improved Flour and Meal Bolt, of which the following is a specification:

Our invention consists of a flat inclined shaking bolt, in which the cloth is arranged in wave-like form, which greatly facilitates the work.

The invention also comprises details in the construction and arrangement of the sieve; also knockers for keeping the cloth clean, and also a contrivance of the bolt to cool the meal, all as hereinafter described.

Figure 1 is a longitudinal sectional elevation of our improved bolt, taken on line *x x* of Fig. 2. Fig. 2 is a transverse section taken on line *y y* of Fig. 1. Fig. 3 is a horizontal section on line *z z* of Fig. 1; and Fig. 4 is a detail.

Similar letters of reference indicate corresponding parts.

A represents a couple of boards set edge-wise and parallel to each other, a suitable distance apart, for forming the sides of the bolt, of which B represents the cloth, the boards being fitted together by cross-pieces C D, and suspended by flexible hangers E from a frame, F, which is adjustable up and down at one end by the roller G and chains H, to regulate the inclination of the sieve.

For wide sieves a partition, I, will be arranged along the middle; but this will not be needed for narrow ones.

The cloth B is arranged in wave-like form on the cross-pieces J and curved longitudinal wires K, and it is secured at the middle and the edges between the edges of the partition I and the sides A, which are divided in curved lines, coinciding with the wave lines of the cloth, and, in addition, the edges of the cloth are sewed to a line of tacks, L, by cords M, which stretch the cloth laterally. The cloth is also attached to the cross-pieces J to prevent chafing on them.

The wave arrangement of the cloth is designed to facilitate the passing of the flour

through it by being thrown against the ascending sides, and by falling from the crests into the hollows, and also by the undulating action of the hollow portions of the cloth produced by the shaking of the sieve. This form of the sieve makes it an excellent cooler for the unbolted meal, on account of throwing it up and exposing it to the air.

Over a portion of the upper end of the cloth is a riddle, N, of coarse wire, to throw off the dough balls through spouts O, and under the cloth are swinging knockers P for clearing the cloth, and with the knockers is a slide, Q, with stops R for sliding under the knockers, to stop them when they are not required to work. S is a sliding cut-off arranged under the cloth, to vary the point of separating the middlings from the flour, and provided with a handle, T, projecting out at the tail of the sieve, and having notches U to catch on the cross-piece Z, to hold it where desired, and a spring, W, keeps the notches engaged. The handle Q of the knocker-stop is similarly notched, and has a spring, W.

The elastic hangers E have an adjustable stiffener, X, by which their tension and range of motion can be varied at will, to assist the cranks by which the sieve is operated to pass the centers.

The flour falls on the zinc bottom Z of the sieve-case, which delivers it into the flour-chest through the opening Y.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. A flour or meal bolt consisting of a suspended movable frame and a flexible cloth, arranged in wave-like form between the boards A A of frame, as and for the purpose described.

2. The combination, with cloth B, of the cross-pieces J and longitudinal wires K, arranged to support it in the manner specified.

3. The combination of the knockers P and sliding stops Q R with the cloth B, substantially as specified.

4. The combination, with bolting-cloth B, partition I, cross-pieces J, and longitudinal

wires K, of tacks L and cords M, as and for the purpose specified.

5. The combination of the adjusting stiffeners X with the elastic hangers E and the swinging sieve, substantially as specified.

6. The cut-off S, provided with notched handle T, in combination with spring W and

cross - piece Z, as and for the purpose described.

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Witnesses:

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