

O. I. Myers,
Flour Bolt.

No. 113,443.

Patented Apr. 4, 1871.

Fig. 1.

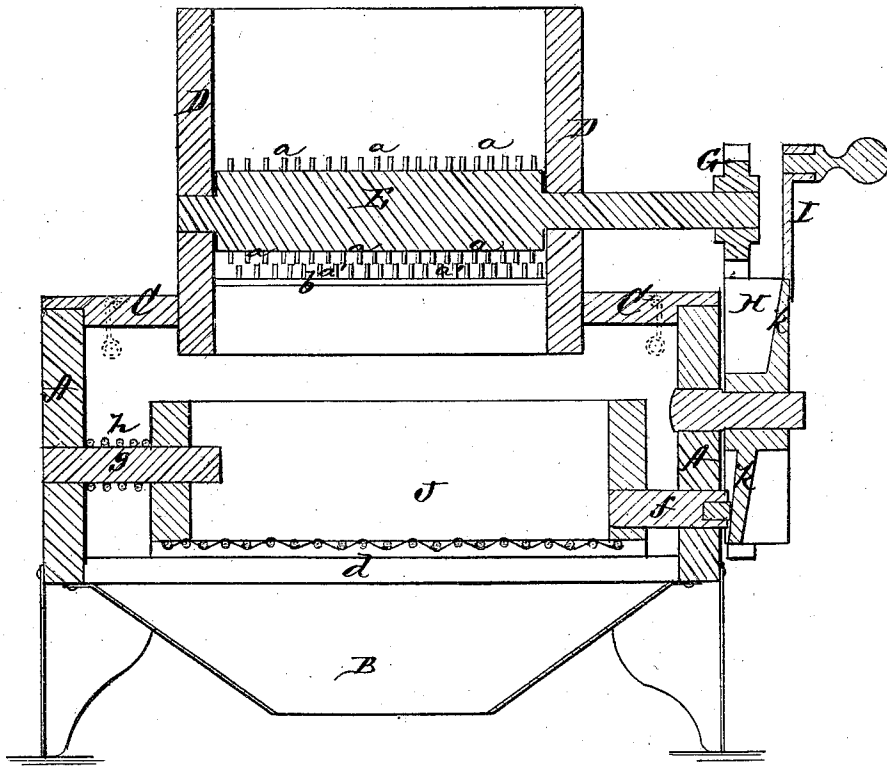
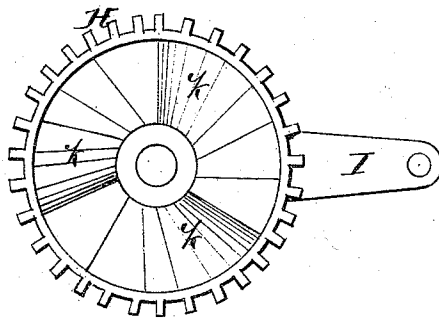


Fig. 2.



Witnesses.
 Jas O Hutchinson
 Chas L. Evert

Inventor.
 Oliver A. Myers
 per
 Alexander Mason
 atty.

United States Patent Office.

OLIVER D. MYERS, OF DOYLESTOWN, PENNSYLVANIA.

Letters Patent No. 113,443, dated April 4, 1871.

IMPROVEMENT IN FLOUR-SIFTERS.

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, OLIVER D. MYERS, of Doylestown, in the county of Bucks and in the State of Pennsylvania, have invented certain new and useful Improvements in Flour-Sifters; 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-sifter," as will be hereinafter more 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 of my flour-sifter; and

Figure 2 is a side view of a cam cog-wheel used in the same.

A represents a box of any suitable dimensions and shape, provided with a funnel or hopper-shaped bottom, B, through which the sifted flour falls into a pan or other vessel placed for its reception.

C represents the lid of the box A, said lid being provided with a longitudinal slot or opening, in which the lower end of a hopper, D, is inserted.

Longitudinally through the hopper D passes a cylinder, E, provided with pins or teeth *a a*, and in the lower end of the hopper are bars *b b*, also provided with teeth *a'*, the cylinder-teeth *a a* passing between the teeth *a'* when the cylinder is revolved, so as to mash up any lumps that may be in the flour before it passes down on to the sifter.

One of the journals of the cylinder E extends beyond the box A, and is provided with a pinion, G, which gears with a cog-wheel, H, mounted on a journal on the end of the box, said wheel being provided with a crank, I, for turning the same.

The flour being placed in the hopper D, and the lumps separated by the teeth *a a'*, the flour falls down on the sifter J, within the box A, said sifter resting and moving upon cleats or ways *d d* in the sides of the box.

In one end of the sifter J is a pin, *f*, which passes through the side of the box A, and into the cog-wheel H, while another pin, *g*, attached to the opposite end of the box A, passes through the opposite end of the sifter, this latter pin *g* being surrounded by a spiral spring, *h*, between the box and sifter.

The cog-wheel H is cast with one, two, or more cams or inclines, *k*, against which the outer end of the pin *f* bears. Now, as the wheel H is revolved, these cams one after the other will force the pin *f* inward, moving the sifter J to the opposite end of the box, and compressing the spring *h*.

As soon as the cams clear the pin *f*, the spring *h* throws the sifter suddenly and forcibly back again, causing the flour to pass through the sifter.

Having thus fully described my invention,

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

1. The sifter J, with pins *f g* and spring *h*, in combination with the cams or inclines *k k* on the cog-wheel H, substantially as and for the purposes herein set forth.

2. The combination of the box A, hopper-bottom B, hopper D, toothed-cylinder E, sifter J, and wheel H, provided with cams or inclines *k k*, all constructed and arranged to operate substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 25th day of February, 1871.

OLIVER D. MYERS.

Witnesses:

A. P. SCHURZ,

EDWARD H. ALBERTSON.