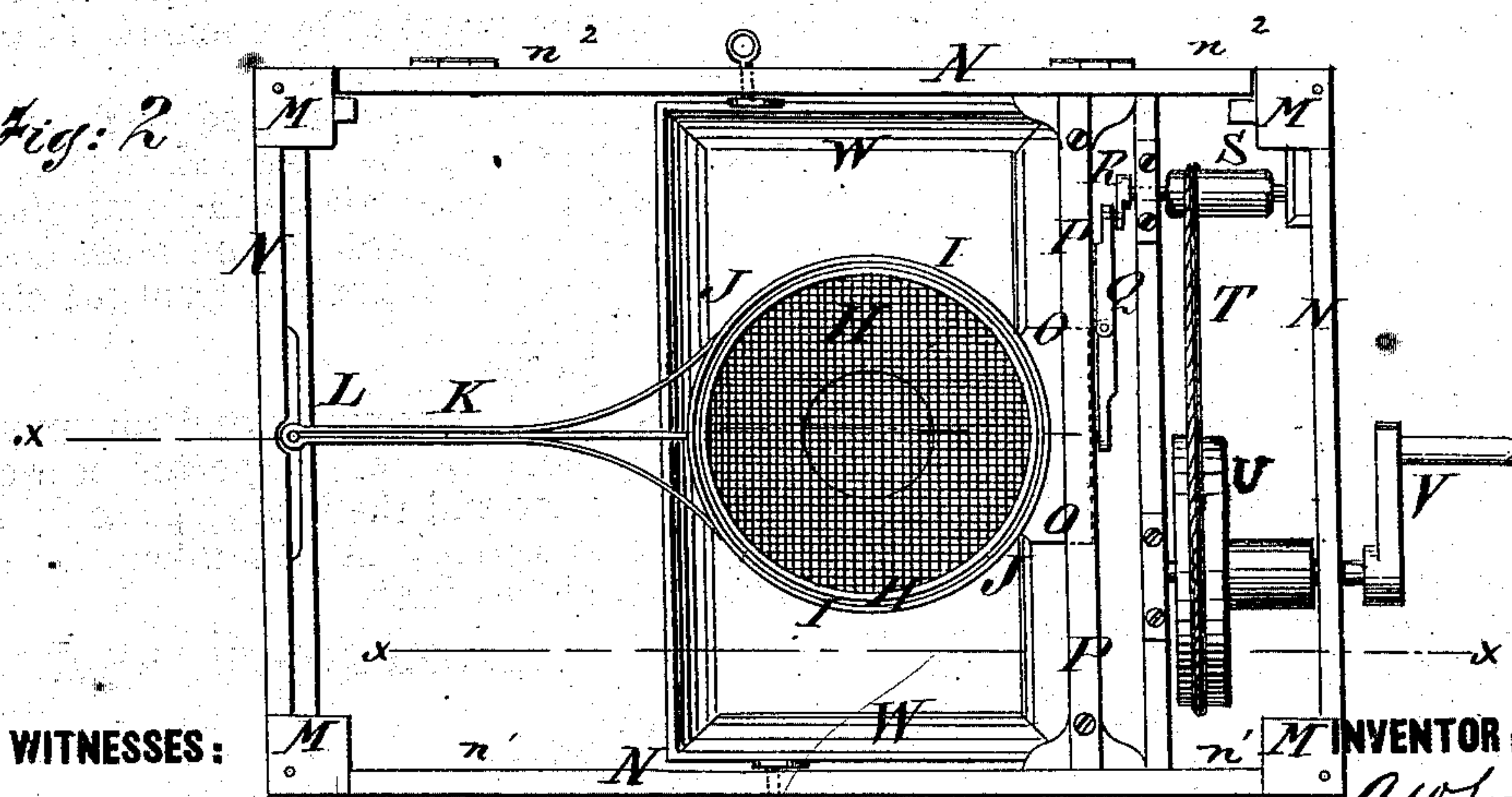
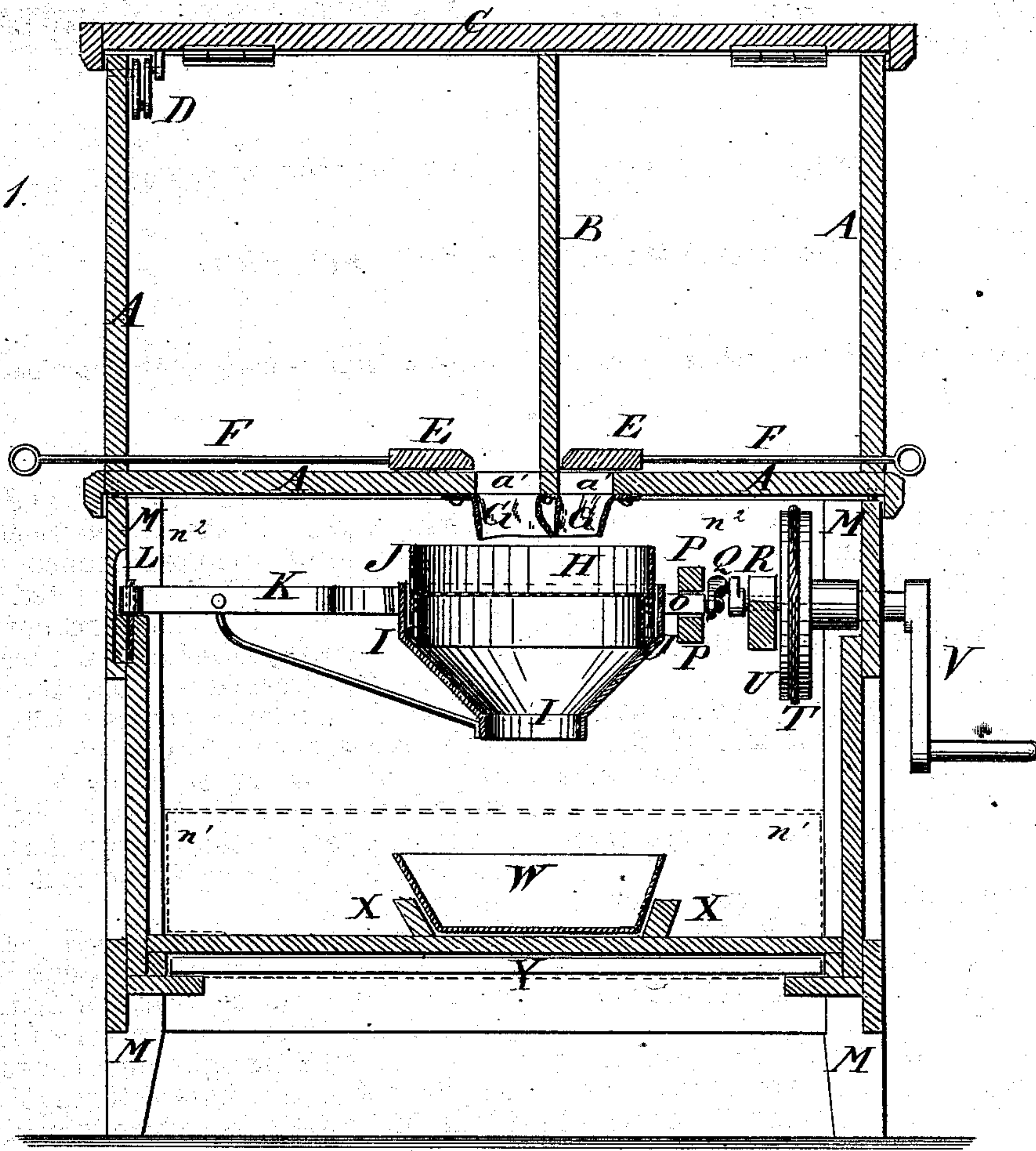


## Flour-Sifters.

No. 158,536.

Patented Jan. 5, 1875.



**WITNESSES:**

**INVENTOR:**

BY

**ATTORNEYS,**



# UNITED STATES PATENT OFFICE.

ALGERNON W. SMITH, OF LEXINGTON, MISSOURI.

## IMPROVEMENT IN FLOUR-SIFTERS.

Specification forming part of Letters Patent No. **158,536**, dated January 5, 1875; application filed June 13, 1874.

*To all whom it may concern:*

Be it known that I, ALGERNON W. SMITH, of Lexington, in the county of La Fayette and State of Missouri, have invented a new and useful Improvement in Combined Flour and Meal Chest and Sifter, of which the following is a specification:

Figure 1 is a vertical longitudinal section of my improved device, taken through the line *x x x*, Fig. 2. Fig. 2 is a top view of the same, the chest being removed.

Similar letters of reference indicate corresponding parts.

The invention relates to the construction of the sieve holder or receptacle, its mode or means of support, and the devices for reciprocating it in the arc of a circle, as hereinafter described.

The chest A is divided into flour and meal compartments by a vertical partition, B, and has a hinged cover, C, provided with a jointed brace-rod, D. The flour and meal escape through the holes *a a*, which have spouts G and closing-slides E, operated by rods F. H is an ordinary sieve, and is placed in a hopper, I, into which the flour or meal falls from the sieve H, and which is secured to a frame, J. The sieve H may be removed through the door *n*<sup>2</sup>. The under part or bottom of the hopper I being in the form of an inverted truncated cone adapts it to support the sieve, and also to gather and deliver the sifted flour or meal into the narrow tray. The frame J, upon one side of the hopper I, is extended into an arm, K, in the outer end of which is formed an eye to receive a pivot, L, attached to the frame M, that supports the chest A, or to the casing N, that incloses the said frame M. The frame J, at the other side of the hopper I, is attached to a block, O, that slides in a slot in the bar P, attached to the frame M or casing

N, and by which the frame J and hopper I are supported. To the sliding block O is pivoted one end of a jointed connecting-rod, Q, the other end of which is pivoted to a short crank, R, attached to the journal of the small pulley S, pivoted to the frame M, or casing N, or to cross-bars attached to said frame or casing. Around the pulley S passes a belt, T, which also passes around a large pulley, U, also pivoted to the frame M, or casing N, or to cross-bars attached to said frame or casing. One of the journals of the large pulley U passes out through the casing N, and to it is attached the crank V.

By turning the crank V slowly, the hopper I will be vibrated rapidly horizontally, and in the arc of a circle, so that the flour or meal in the sieve H will be thrown quickly from side to side in a straight line across the bottom thereof. As it passes through the sieve it falls into a tray, W, which is held in place by cleats X. Both it and the dough-kneading board Y may be removed by opening the door *n*<sup>1</sup> in the part N of the box.

By detaching the jointed rod Q from the crank R, and raising the frame K so that the eye in its end is raised above the pivot-pin in the chest, the hopper, frame, and plate O can be easily and readily removed from the chest whenever desired.

What I claim is—

The hopper I, for receiving and supporting the ordinary sieve H, and supported between the pivoted frame and the sliding plate O, and actuated substantially as described, for the purposes herein set forth.

ALGERNON W. SMITH.

Witnesses:

GEO. ZEILER,  
GEO. G. CUMMING.