C. Huntley,

Flour Sifter.

No. 111,545. Patented Feb. 7. 1871.

Fig. 2.

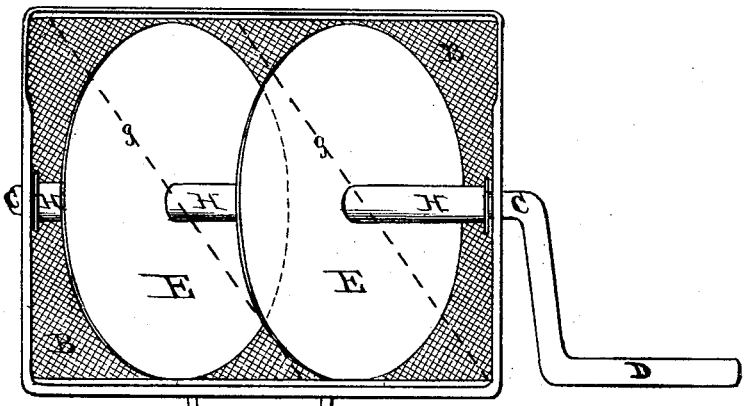
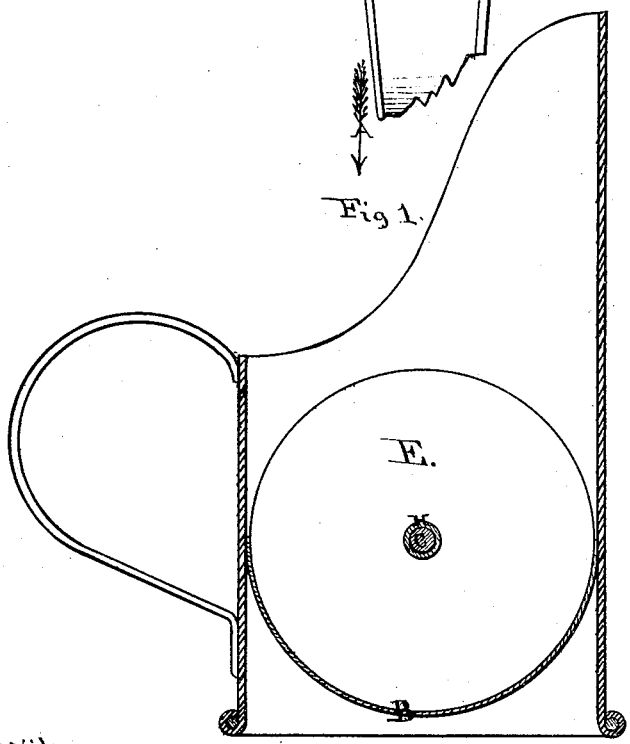



Fig 1.




Witnesses

John Coleburne

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# UNITED STATES PATENT OFFICE.

CURTIS HUNTLEY, OF LOWELL, MASSACHUSETTS.

## IMPROVEMENT IN FLOUR-SIFTERS.

Specification forming part of Letters Patent No. **111,545**, dated February 7, 1871.

*To all whom it may concern:*

Be it known that I, CURTIS HUNTLEY, of Lowell, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Flour-Sifters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, making part of this specification, in which—

Figure 1 is a side sectional elevation; Fig. 2, an end view taken in the direction of the arrow A.

This invention relates to that kind of flour-sifters which are used in connection with the scoop, and has for its object not only to sift flour or meal, or other finely-pulverized substance containing impurities, but to stir and mix two or more kinds of substances while in the process of sifting, thereby performing two or three processes by a single operation of the machine.

In constructing my improved flour-sifter the scoop may be made in any convenient and usual form, with the rear end closed by a semicircular screen of woven wire or other suitable open-work, B.

Through the two sides of the scoop, and centrally and concentrically with the curved screen, I insert a shaft, C, provided at one end with a crank, D, as usual.

On the shaft C, and within the scoop, I arrange and secure one, two, or more thin oval plates, E. Each of these oval plates is set obliquely with the shaft, or at an angle, about as shown by dotted lines *g*. These oval plates are so arranged upon the shaft that when the latter and the plates are rotated their edges shall just clear the screen, each plate performing a wiping or drawing motion and action, first in one direction, then in the opposite direction, against the whole curved surface of the screen. This drawing or wiping motion of the revolving plates not only works the flour or other substance or substances through the screen, but also stirs or mixes two or more substances placed within the scoop.

By means of the peculiar construction, arrangement, and operation of the mixing and sifting devices, hard substances or impurities contained in the material being sifted are not pressed against the meshes or rubbed into the screen, as in most of the flour-sifters, but all such foreign substances or impurities are moved about on the surface of the screen until the finer particles, or those intended for use, are passed through the meshes of the screen, while the retained impurities are easily emptied from the scoop.

By the above-described mode of operation, and by the use of my said improvement, the screen is less liable to be filled or clogged with impurities, or to become worn by the operating mechanism.

I generally apply the operating-plates E to the outside of a tube or quill, H, and secure them with solder, and at the desired angle. Then, placing the whole within the scoop, I insert the shaft C and secure the parts together by a pin or by other suitable means.

I claim as my invention—

The combination of one or more obliquely-arranged oval plates, E, with a tube or quill, H, and a crank-shaft, all operating in connection with a curved screen, arranged within a flour or meal scoop, as described.

CURTIS HUNTLEY.

Witnesses:

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