D. C. Colby,

Flour Siere.

No. 48,156. Patented June 13, 1865.

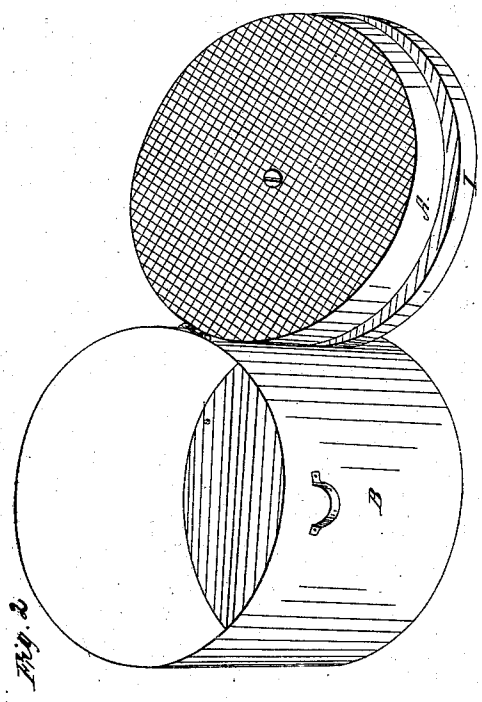

Fig. 2.

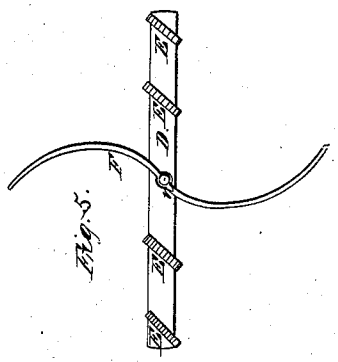

Fig. 5.

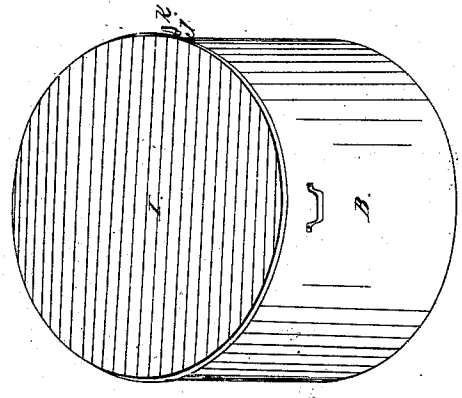

Fig. 3.

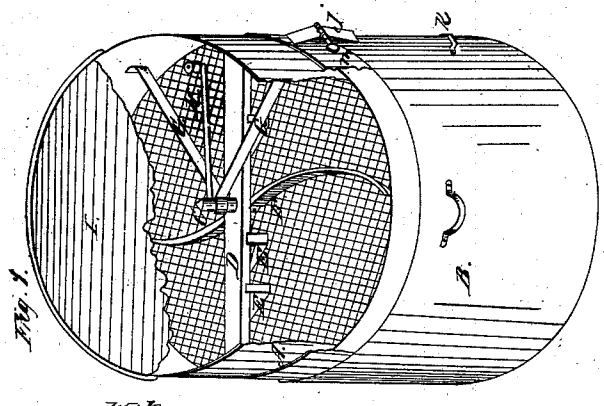

Fig. 1.

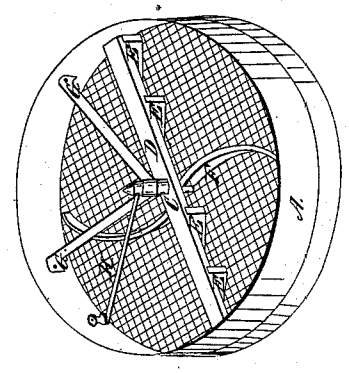

Fig. 4.

Witnesses.

Wm. D. Harris

Geo. A. Colby

Inventor

Daniel C. Colby

UNITED STATES PATENT OFFICE.

DANIEL C. COLBY, OF CLAREMONT, NEW HAMPSHIRE.

IMPROVED FLOUR-SIFTER.

Specification forming part of Letters Patent No. **48,156**, dated June 13, 1865.

To all whom it may concern:

Be it known that I, DANIEL C. COLBY, of Claremont, in the county of Sullivan and State of New Hampshire, have invented certain new and useful Improvements in Flour and Meal Sifters for Family Use; and I do hereby declare the following is a full and exact description of the same, reference being had to the drawings that accompany and form a part of these specifications, in which—

Figure 1 is a perspective view, with a portion of the front and a portion of the cover removed, so as to show the arrangement of the interior parts; Fig. 2, a perspective view, showing some of the parts in a different position; Fig. 3, view of the flour-box removed from the other part, to which it is usually attached; Fig. 4, a view of the part containing the sieve detached from the flour-box, on which it ordinarily rests, as in Fig. 1; Fig. 5, a sectional view, showing those parts that are brought to bear directly upon the flour or meal to be sifted.

Letter A represents a cylinder containing a perforated bottom forming a sieve; letter B, a box or receptacle to receive the flour as it falls from the sieve; C, an upright shaft standing in the center of the sieve; D, a bar arranged on the shaft C, somewhat above the perforated bottom of A, yet extending quite across its diameter; E E, narrow strips of leather or wood attached to the under side of the cross-bar D, and resting on the upper surface of the sieve; F, a cross-bar just below the bar D, passing through the center of the lower end of the shaft C, and has its two ends curved in opposite directions, (as seen in Fig. 4 or 5;) G G, braces to sustain the shaft C in its proper position; H, a lever to revolve the shaft C by; I, a cover fitting both A and B, as may be seen in Figs. 1 and 3. *j* is a hinge joining the cylinder A with the lower cylinder or flour-box, B; *k*, a loop attached to the box B directly beneath the hinge *j*; *l*, a hook on the cover I, made to insert in the loop *k*, as seen in Fig. 2. This hook has also an eye to fit it for the hinge *j* when the cover is used upon the box B, as in Fig. 3. *m* is a pin, made of wire, to connect the joint of the hinge *j*, and, being provided with a loop at one end, is easily withdraw; *n*, a screw passing up through the perforated bottom or sieve, through the bar F, and some distance into the shaft C, and serves to keep the lower end of this shaft in place; *o o*, handles, one on the two opposite sides of the flour-box B, to carry it by.

The object of my invention is to provide a neat and compact family sieve, one that obviates the necessity of applying the hands to the flour or meal, and one that secures great rapidity in sifting, and at the same time throws off no fine flour-dust about the pantry or over the clothes of the operator; and, furthermore, to provide a ready way of pouring off the bran without disturbing that part of the apparatus which contains the meal already sifted; and, also, to provide a convenient method of detaching that part of the apparatus containing the sieve when it may be desired for separate use, and to have the parts so arranged that the flour or meal, after it has been sifted, may be poured out for use as handily as from a simple bucket or pail, without the use of slide or shovel.

To show clearly how I secure these desirable qualities, and to enable others skilled in the art to make and use my invention, I will describe more fully its construction and mode of operation.

I make the cylinders A and B of wood or plate-tin, the perforated bottom of A usually of wire-cloth, fastened on in the ordinary manner of making sieves.

The drawings will sufficiently illustrate the manner of combining the cross-piece D, the curved bar F, and the lever H to the shaft C.

The braces G G are made of stout tin, folded and bent around the shaft C just above the bar D, with a rivet to keep the loop around the shaft from opening. These braces, the two parts of the hinge *j*, the loop *k*, the hook *l*, and the handles *o o* are riveted to the parts to which they are attached.

The strips E E are arranged angling to the bar D, so that when there is a large quantity of flour in the sieve a portion of it may slip through between these strips and be thrown nearer the center of the sieve, thus relieving the otherwise too great strain upon the shaft C and attaching parts, and also preventing the flour from being thrown too much to the outside of the sieve by centrifugal force, as it would most assuredly be were these strips arranged straight along the bar D.

The bar F is curved on each side of the shaft C, and operates also to keep the flour from being forced out against the rim of the sieve, and serves also to keep the flour evenly distributed

over the sieve. The angle of the strips E E and the curves of the bar F are such that they perform their legimate office when the shaft C is turned around from left to right.

The hook *l* is used to attach the cover I temporarily to the loop *k* on the side of the flour-box B, as seen in Fig. 2. Now, with this arrangement we have only to turn the sieve on its hinges, as seen in Fig. 2, and the bran or whatever else there may be falls directly into the cover I. In case the box B at any time contains a quantity of flour already sifted and it is desired to sift something else, the pin *m* is readily withdrawn and the sieve A detached, and may be used by itself like any other ordinary sieve, and the cover I meantime be used on the flour-box B, protecting the contents thereof from dust or insects, while the sieve A is being used elsewhere. Thus it will be seen that the cover I is used to cover the top of the sieve, as in Fig. 1, sometimes to receive the bran, as in Fig. 2, at other times upon the flour-box B, as in Fig. 3.

In sifting meal of any kind in which there is much bran to be disposed of my arrangement will be found of the greatest convenience, and the flour may be as readily poured from the box B as from any pan or pail simply by turning the rim back on its hinges. The flour-box B not only keeps all dust from flying about when sifting, but affords a very convenient article for keeping any not wanted for use at the time.

I use wire-cloth of different degrees of fineness.

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

The arrangement of two or more strips, E E, upon the under side of the bar D, substantially as described, and the combination of the said bar D and the cross-piece F, as and for the purposes set forth.

DANIEL C. COLBY.

Witnesses:

THOS. I. HARRIS,

GEO. I. COLBY.