(No Model.)

M. LARY.

SIEVE FOR SIFTING FLOUR.

No. 454,599. Patented June 23, 1891.

FIG. 1.

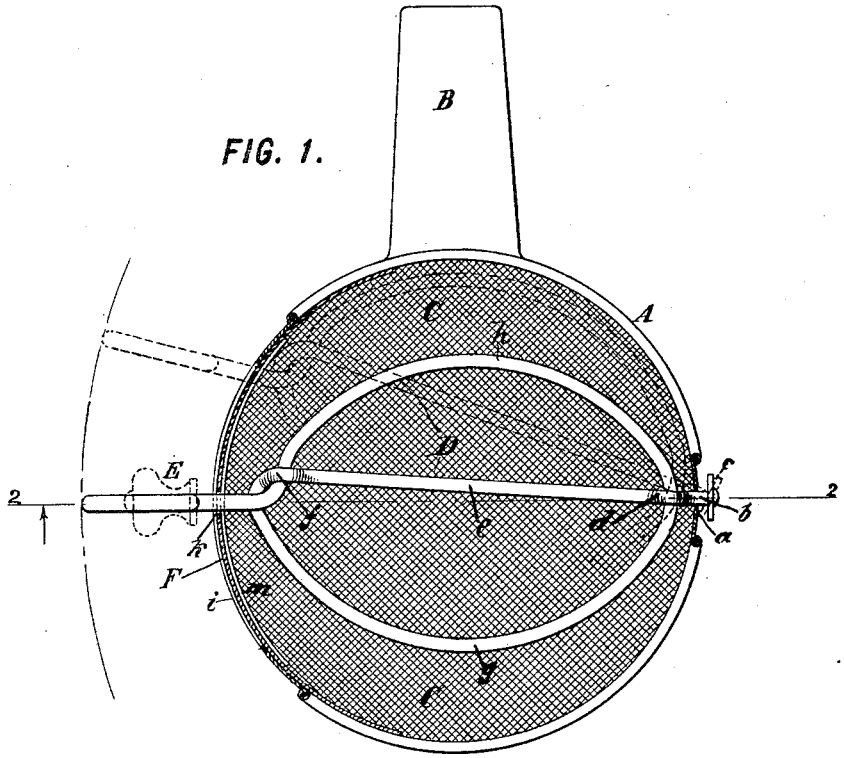
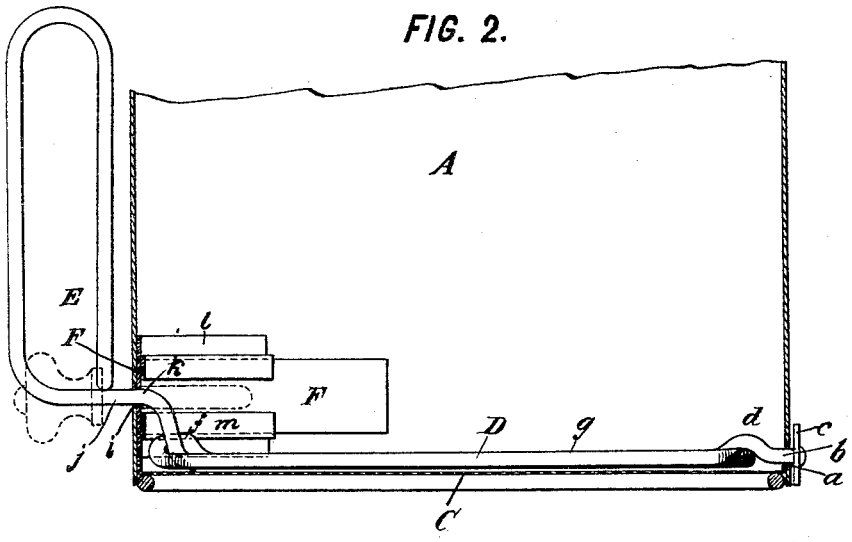


FIG. 2.



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UNITED STATES PATENT OFFICE.

MORRIS LARY, OF NEW YORK, N. Y.

SIEVE FOR SIFTING FLOUR.

SPECIFICATION forming part of Letters Patent No. 454,599, dated June 23, 1891.

Application filed March 14, 1891. Serial No. 385,005. (No model.)

To all whom it may concern:

Be it known that I, MORRIS LARY, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Sieves for Sifting Flour and other Substances, of which the following is a specification.

This invention relates to sieves of the class having a body provided with a handle and having a flat screen across the bottom, over which an agitator is worked to facilitate sifting the contents of the sieve through the screen.

My invention aims to provide an improved sieve of this general class and one which can be conveniently and rapidly operated, which will be inexpensive, and which can be conveniently operated in contracted spaces. To this end I pivotally connect the agitator at one end to the sieve near one side thereof and carry its other end outside of the body of the sieve through a slot in the wall thereof, which slot is closed by a sliding cover. I also provide certain improvements in details of construction, which will be fully set forth hereinafter.

In the accompanying drawings, which illustrate the preferred form of my invention, Figure 1 is a plan, partially in horizontal section, of a sieve constructed according to my invention, and Fig. 2 is a fragmentary vertical section thereof cut on the line 2 2 in Fig. 1.

Referring to the drawings, let A indicate the sieve-body; B, its fixed handle; C, the screen, and D the agitator.

The body A is usually constructed of tin, being preferably cylindrical in form, and is generally constructed in the form of a scoop, its handle B being fixed to one side in such manner that the sieve can be conveniently used to scoop up the flour, and can then be held by its handle while the agitator is operated to sift out its contents. The screen C is preferably approximately flat and extends across the lower part of the body A.

According to my invention the agitator D is pivotally connected at one end to the sieve near one side thereof, and extends thence over the screen C and outside of the sieve at the opposite side thereof, terminating in a handle, as E. By this construction the agitator-handle when oscillated moves in an arc of much greater radius than that of the wall of the sieve-body A, whereby its path of travel is nearly in a straight line, a condition which renders the sifting operation more convenient than heretofore when the sieve is in a contracted space, as is frequently the case when it is used in a closed chamber beneath a flour-receptacle, such as that shown in my United States patent, No. 416,228, dated December 3, 1889.

I provide a hole *a* in the wall of the body A, and I construct the agitator D of wire and pivotally connect it to the sieve by inserting its end *b* through the hole *a* and fastening it in this position in any suitable manner, as by riveting the washer *c* on its outer end, as shown. To prevent outward displacement of the end *b* of the wire, I prefer to construct it with a bend—such as *d*, for example—in proximity to the hole *a*, which will serve this purpose, and I construct the agitator of a single piece of wire extending across the screen, with a substantially straight portion *e* to the point *f*, bent on itself at this point and returning in a curve *g* into proximity with the hole *a*, crossing itself at the bend *d*, and extending in a curve *h* to the point *f*, where it passes through the first bend and extends to the outside of the sieve. The body A is provided with an elongated slot *i*, and the agitator D is constructed with a straight portion *j*, passing outwardly through this slot and having a handle on its outer end. This handle may be of any well-known construction—as, for example, that shown in dotted lines in Fig. 2; but I prefer to continue the agitator-wire upward and provide a handle thereon arranged substantially parallel with the wall of the sieve, whereby when desired the latter may be supported by the agitator-handle when the user finds it advantageous to withdraw the hand engaging the sieve-handle B. The wire is bent into a vertical loop exteriorly of the sieve, which loop constitutes the handle E.

To prevent leakage through the slot or aperture *i*, I provide an improved slide to cover this aperture. This consists of the sliding plate F, mounted on the inner wall of the body A, having a shape corresponding to the shape of the wall, engaging the agitator D and constructed to move therewith. The slide

F is provided with a hole *k*, through which the portion *j* passes, the hole being sufficiently large to permit movement of the portion *j* therein, and the slide is constructed of sufficient length to constantly cover the aperture *i* throughout the entire oscillatory movement of the agitator D.

To prevent leakage from above the slide F and to hold it securely in position, a guard *l* is provided within the sieve, which guard overlaps said slide throughout the length of the aperture *i*. It consists of a piece of sheet metal soldered to the inner wall of the body A above the slide F and having a flange overhanging the upper edge of the latter. For further security against the displacement of the slide and against leakage a guide *m* is provided, which engages the lower edge of the slide F and is identical in construction and function with the guard *l* just described.

In operation the sieve is held by its handle B, and the agitator D is operated by grasping its handle E and oscillating the agitator on its pivotal connection by moving the handle through the arc indicated in dotted lines in Fig. 1. In this figure parts of the agitator are shown in dotted lines in one of the extreme positions, from which it will be seen that as the agitator is oscillated from one extreme to the other its portions *e g h* traverse the entire surface of the screen C, thereby rapidly sifting the contents of the sieve through the screen. As the agitator lies in the central position, its handle E is close to the wall of the body A, while as it approaches the extreme positions its handle leaves such wall, since it moves in an arc of greater radius than that of the sieve-body. It will be seen, also, that the portion *j* of the agitator must for the same reason be constructed to play through the hole *k* of the slide F.

What I claim is, in a sieve for sifting flour and other substances, the following-defined novel features and combinations, substantially as hereinbefore set forth, namely:

1. In a sieve having a body constructed with a hole near its bottom, a handle for the body, and a flat screen, an agitator for facilitating sifting, consisting of a wire pivotally connected at one end in said hole, extending across said screen, bent on itself at *f*, returning in a curve *g* into proximity to said hole, crossing itself and extending in a curve *h* to *f*, and extending thence outside the sieve and terminating in a handle, as and for the purposes set forth.

2. In a sieve having a circular body constructed with a slot *i*, a handle for the body, and a flat screen, the combination of an agitator for facilitating sifting, pivotally connected within the sieve, extending across the screen through said slot and terminating outside the sieve in a handle, a slide F within the body, constructed to cover said slot, engaging said agitator and movable therewith, a guard *l* to cover the upper edge of said slide throughout the length of said slot, and guide *m*, engaging the lower edge of said slide, whereby the latter is held in place and leakage around it prevented.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

MORRIS LARY.

Witnesses:
GEORGE H. FRASER,
CHARLES K. FRASER.