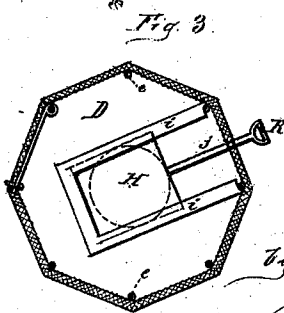
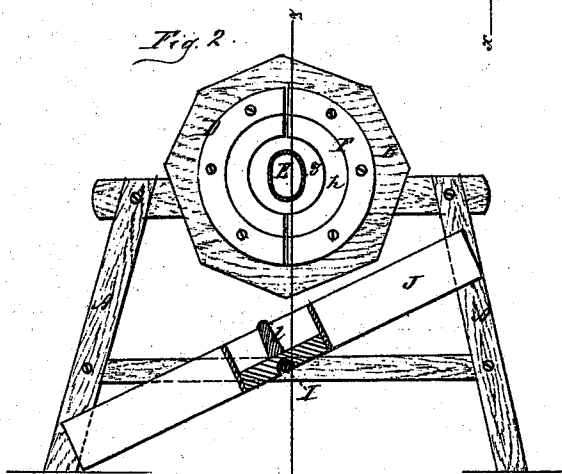
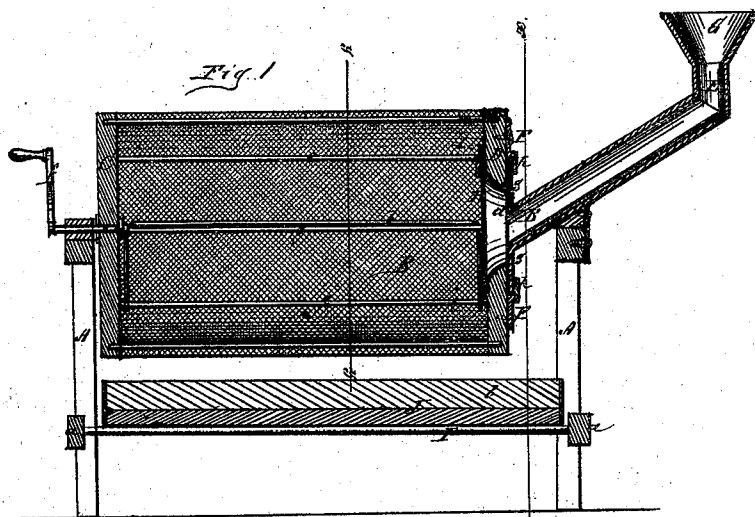


F. K. Linn,

Ash Sifter.

No. 100421.

Patented Mar. 1. 1870.



Witnesses:

Thos Thompson  
Samuel Smith

Inventor:  
Francis K. Linn

by Alex. A. C. Klauke & Co.  
his Attorneys.

# United States Patent Office.

FRANCIS X. LIPP, OF BALTIMORE, MARYLAND.

Letters Patent No. 100,421, dated March 1, 1870.

## IMPROVED ASH-SIFTER.

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, FRANCIS X. LIPP, of the city and county of Baltimore, in the State of Maryland, have invented a new and useful Improvement in Ash-Sifters; and I do hereby declare the following to be a full and correct description of the same, sufficient to enable others skilled in the class to which my invention appertains to fully understand and construct the same, reference being had to the accompanying drawings which make part of this specification, and in which—

Figure 1 is a longitudinal vertical section of my improved ash-sifter in line *z z*, fig. 2;

Figure 2 is a cross-section of the same in line *x x*, fig. 1; and

Figure 3 is a sectional inside view of the sifting-drum in line *y y*, fig. 1.

Like letters of reference indicate like parts in the several figures.

The nature of my invention consists—

First, in forming one of the pivots of the revolving drum by a pipe through which the ashes to be sifted are conducted into the drum;

Further, in the peculiar construction of the pivots, and in the arrangement of a sliding door to regulate or entirely shut off the influx of ashes and cinders; and

Lastly, in the construction and arrangement of a reversible trough for the purpose of conducting the sifted cinders from the drum to either side.

A, in the drawings, represents the standards between which the drum B is hung.

This drum consists of two octagonal end boards, C D, connected to each other by wires *e*, which are covered with wire or other suitable gauze, the meshes of which are wide enough to allow ashes to pass out freely, but not so large as to let the cinders pass, which in sifting are retained in the drum.

One of the eight sides of the drum is arranged as a door, as shown at *b*, fig. 3, so that, after sifting, the cinders may be removed through it from the drum.

The end board C has a short trunnion, *c*, revolving in a suitable bearing on one standard, A, and provided at its outer end with a crank, *f*, by means of which the drum is revolved.

The other end board D has a central opening, *d*, corresponding with the opening of a tube, E, which is provided with a disk, *g*.

On the outside of board D is secured a rim, F, formed in two pieces, and with a central concentric flange, *h*, forming a narrow circular recess in which the disk *g* is placed. This disk is thus made the pivot

around which that end of the drum revolves, the flange *h* moving around the disk as the drum is turned.

The tube E extends in an upwardly-inclined position from the drum, and at its upper end is provided with a hopper, G, into which the ashes to be sifted are poured and pass through the tube into the drum.

On the inside of the end board D, one on each side of the opening *d*, are two ways, *i*, in which a door, H, slides, which covers the opening *d*, and is provided with a rod, *j*, ending on the outside of the drum in a handle, *k*, by means of which it is operated.

Each standard A has a cross-piece, *a*, situated below the drum, which cross-pieces are connected to each other by a rod or wire, I, placed centrally under the drum.

This wire forms the pivot for a reversible discharge-trough, J, divided in the center by a board, *l*, into two chutes. This trough is not secured to the wire, but merely rests on it, the wire passing into a central groove, as shown in fig. 2, to prevent the trough from slipping off from the wire.

Ashes are poured into the hopper G, and pass (the door H being slid open) through the tube E and opening *d* into the drum B. The door H is then closed, and the door *b* of the drum secured, when, by turning the crank *f*, the drum is rapidly revolved. The ashes strike against the wires *e*, and the finer particles pass through the gauze, while the cinders are retained in the drum. When the ashes have been sufficiently sifted, the door *b* is opened and the cinders are allowed to fall out of the drum into the trough to either side, as the trough may be placed.

Having thus described my invention,

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

1. The rim F, with its flange *h* formed in two pieces, secured on the end board D, and rotating around the disk *g* of the feed-tube E, substantially as and for the purposes described.

2. The feed-pipe E, when provided with a disk, *g*, which forms the pivot for one end of the drum of a sifter, substantially as and for the purposes described.

3. A sifter in which the feed-pipe forms one of the pivots of the revolving drum, for the purpose of continual feeding, substantially as herein described.

4. In a sifter, in combination with the above parts, a reversible discharge-trough, J, operating and arranged substantially as and for the purpose herein set forth.

Witnesses: FRANCIS X. LIPP.

HENRY A. JOHNSTON,  
HENRY J. ARETZ.