(No Model.)

F. HEIMANN.

ASH SIFTER.

No. 332,394. Patented Dec. 15, 1885.

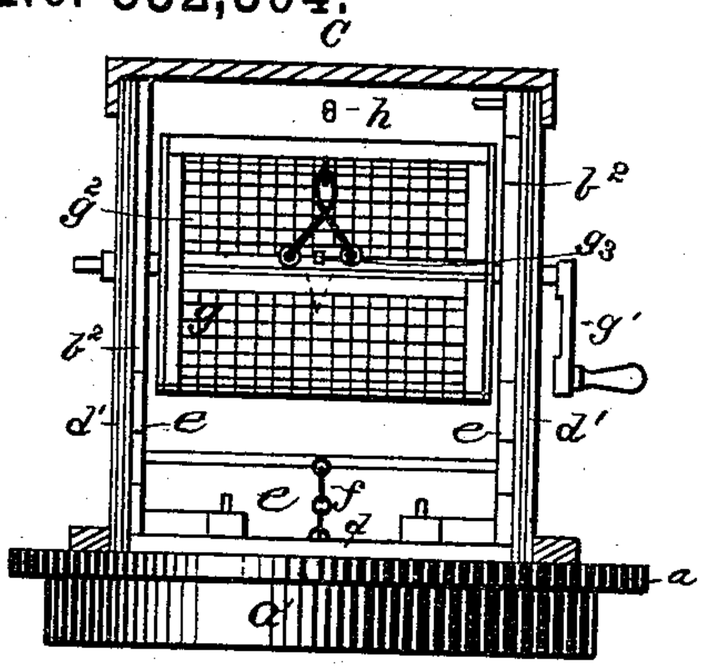

Fig. 1.

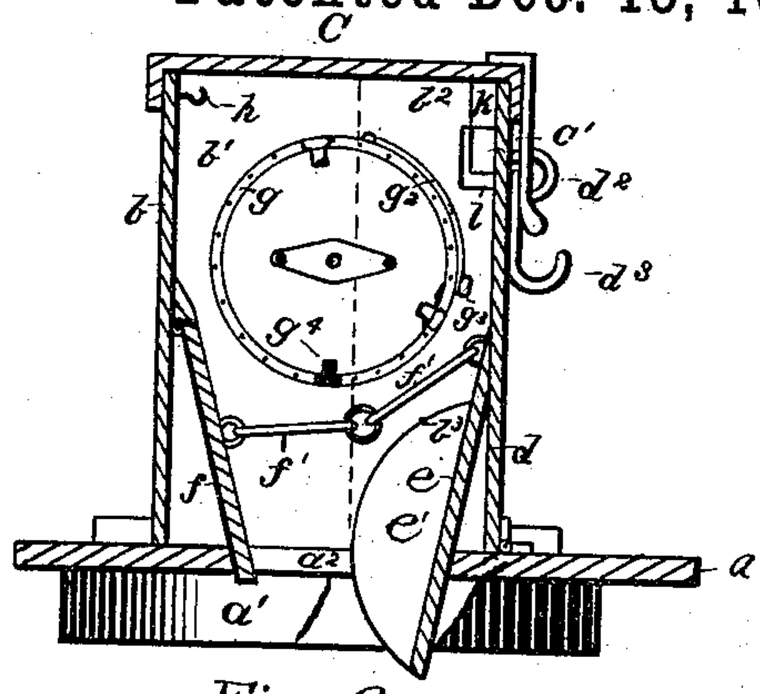

Fig. 2.

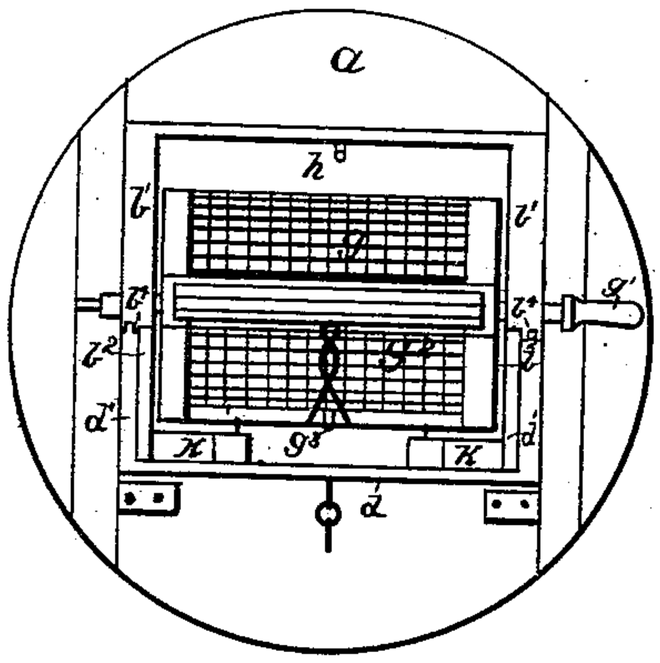

Fig. 3.

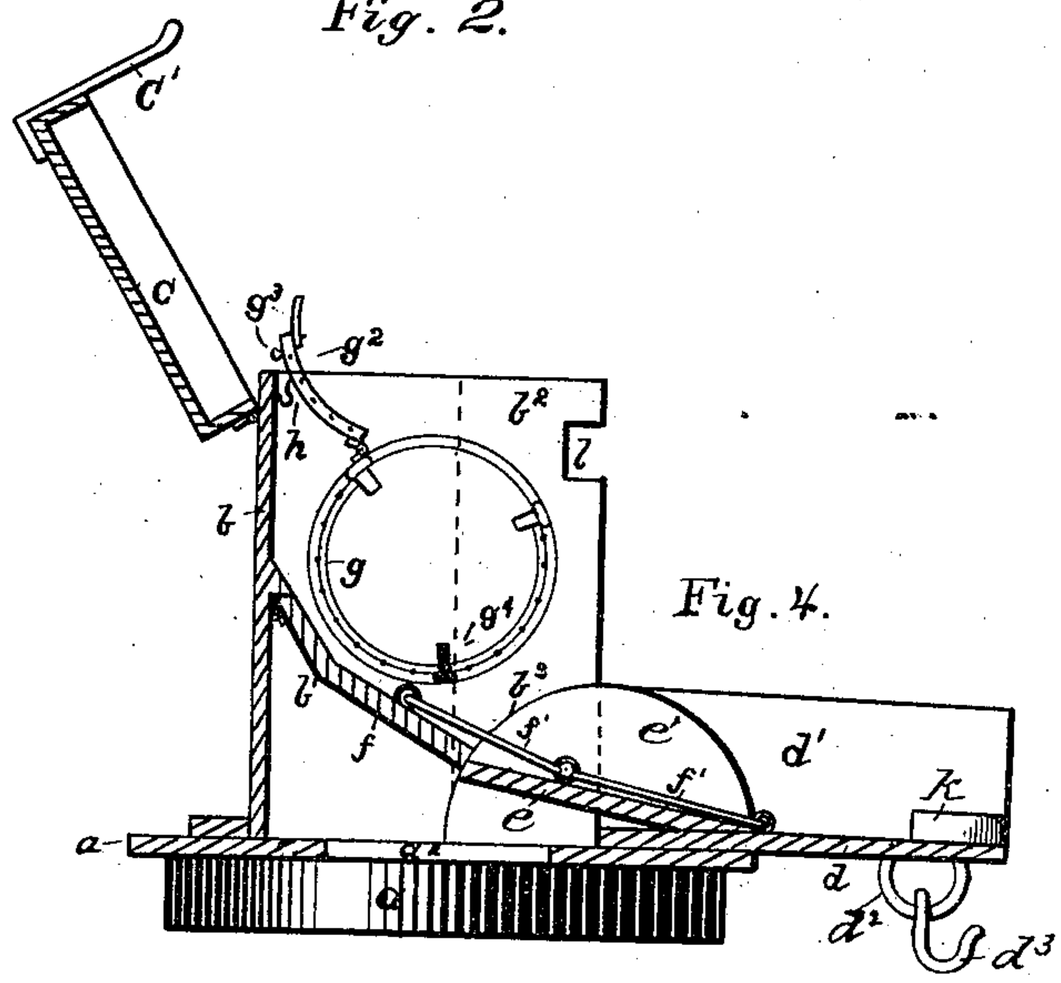

Fig. 4.

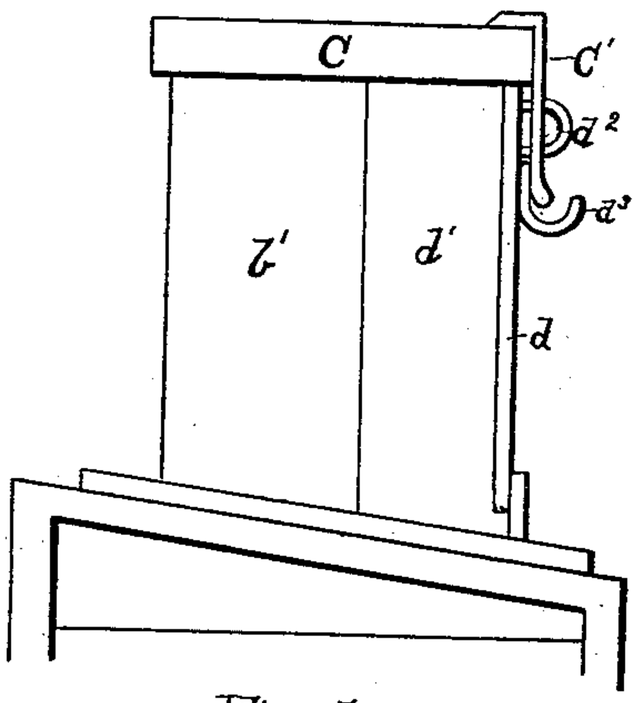

Fig. 5.

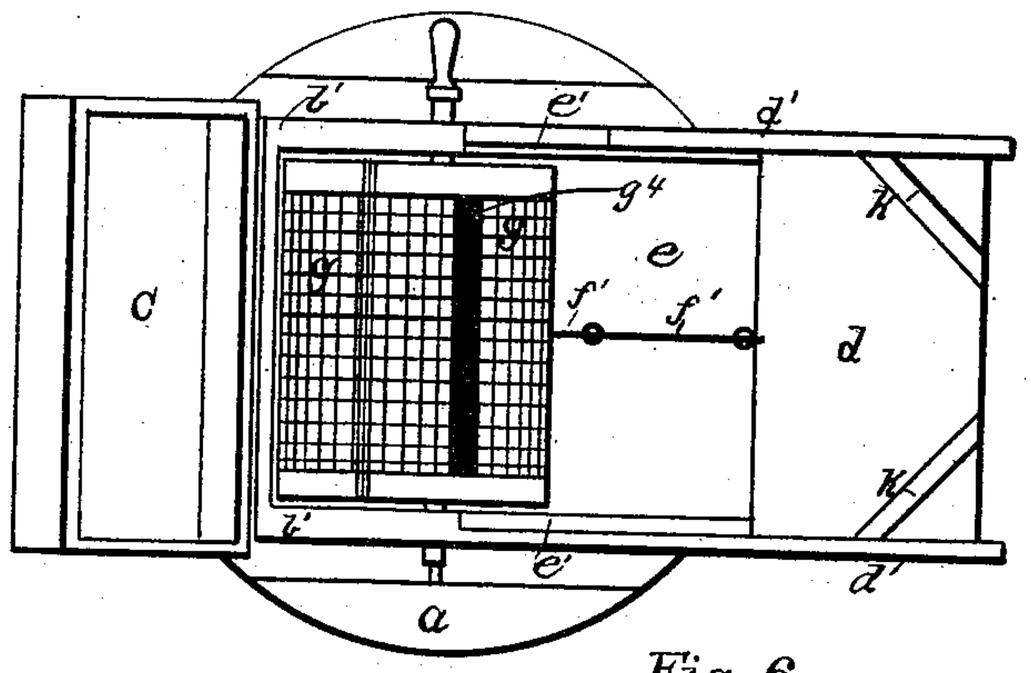

Fig. 6.

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FRANK HEIMANN, OF BUFFALO, NEW YORK.

ASH-SIFTER.

SPECIFICATION forming part of Letters Patent No. 332,394, dated December 15, 1885.

Application filed February 20, 1885. Serial No. 156,525. (No model.)

To all whom it may concern:

Be it known that I, FRANK HEIMANN, a citizen of Prussia, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Ash-Sifters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention consists in certain improvements in ash-sifters, which will be more fully hereinafter described and claimed.

In the drawings, Figure 1 is a front view of the device open. Fig. 2 is a transverse vertical section of the same closed. Fig. 3 is a top plan view of the same closed, with cover removed. Fig. 4 is a similar section to Fig. 2 of the device open. Fig. 5 shows a modification, and Fig. 6 is a top plan view of Fig. 4.

Referring to the drawings, *a* is the circular board which rests upon the barrel, and has on its under side the cylindrical extension *a'*, which extends down over the top of the barrel. A square opening, a^2, is cut in the board, through which the ashes fall. Upon the top side of the board *a* is erected the box or casing in which the sifting of the ashes is done, of which *b* is the back wall, having hinged thereto the cover *c*, having the hasp *c'*. The side walls of the casing are composed of the thick portions *b' b'*, having the thin extension-pieces b^2 b^2, the bottom portions of which are cut away in the quarter-segments b^3 of a circle. The outer ends of the thick portions *b' b'* of the side walls have grooves b^4 cut in their entire vertical length. (See Fig. 3.) The front of the casing is composed of the front wall, *d*, having the side wings, *d' d'*, tongued on their inner vertical ends to fit in the grooves b^4 b^4 of the portions *b' b'* of the casing. This front, *d*, and its wings *d' d'* are hinged to the circular board *a*, so as to permit of their being swung outward.

Upon the inner side of the front wall, *d*, is rigidly secured, at an angle thereto, the piece *e*, which extends entirely across the box or casing, and has secured at each end the semicircular pieces *e' e'*, which rest against and are movable upon the circular ends b^3 of the thin side pieces, b^2 b^2.

About midway of the height of the back wall, *b*, of the casing is hinged the board *f*, extending across the casing, and connected from its center, by the two loosely-pivoted links *f' f'*, with the front hinged wall, *d*. The length of this board *f* is just sufficient to lap over the edge of the piece *e* when the front wall, *d*, is thrown down, as clearly seen in Fig. 4.

Upon the outer face of the front wall, *d*, is secured the staple d^2, over which the hasp *c'* of the cover *c* fits, thereby enabling such cover to be locked by a padlock. Upon this staple d^2 is loosely hung the hook d^3, upon which the coal-pail may be hung when the front wall, *d*, is in the position shown in Fig. 4. Within the casing, in its upper portion, is pivoted the cylindrical sieve *g*, composed, preferably, of coarse wire-gauze, and the crank *g'* serves to turn such sieve.

g^2 is the hinged portion forming a door, by means of which access may be obtained to its interior, and it is provided with the button or catch g^3, to secure the same in closed position. A hook, *h*, is provided upon the inner side of the wall *b*, upon which the door g^2 of the cylindrical sieve can be secured temporarily, as seen in Fig. 4.

Upon the under portion of the cylindrical sieve *g* is secured the weighted rib g^4, extending entirely along the cylinder, which is intended to keep such sieve in the normal position, as shown in Figs. 1, 2, and 3.

At the upper end of wall *d*, and on the inside, are the inclined deflectors *k k*, which, when the wall *d* is thrown down, serve to direct the coals to the pail suspended beneath. The recesses *l* in the thin side walls, b^2, serve to accommodate these cleats *k k* when the box or casing is closed.

The operation of the apparatus just described is substantially as follows: Taking the apparatus as shown in Fig. 2, the cover *c* is thrown back, the door g^2 of the cylindrical sieve is opened, and the ashes to be sifted are introduced. The door is then shut and secured and the sieve is revolved by means of crank *g'*, the ashes passing through the sieve falling down the inner surfaces of the hinged board *f* and the piece *e*, attached to the wall *d*, and through the opening a^2 into the barrel. When

the sifting operation is completed, the cover *c* is raised, the door g^2 is opened and caught upon the hook *h*, and the front wall, *d*, is thrown down, as shown clearly in Figs. 4 and 5, in which position the boards *e* and *f* are brought together by means of the links *f' f'*, so as to form a continuous chute with the wall *d*. After the clinkers have been removed by hand the cover g^2 is released from the hook *h* and the sieve is turned, so as to dump the coals upon the chute formed by the pieces *e* and *f* and the wall *d*, from which they are pushed or scraped into the coal-pail suspended below upon the hook d^3.

Fig. 5 shows the device permanently attached to the sloping top wall of an ash-box, in which position it operates in the same manner as the device shown in the other figures of the drawings.

I claim—

1. An ash-sifter comprising the casing provided with the fixed portions *b b' b'*, the hinged cover *c*, the hinged front wall, *d*, having the side wings, *d' d'*, the cross-board *e*, having the semicircular portions *e' e'*, the extensions b^2 b^2, having the curved ends b^3 b^3, against which the semicircular portions *e' e'* have guiding contact, the hinged board *f*, the links *f' f'*, and the pivoted cylindrical drum or sifter *g*, all operating substantially as shown and described.

2. In an ash-sifter, the combination, with the sifter *g*, hinged board *f*, and links *f' f'*, of the fixed board *e*, and hinged wall *d*, to which the board *e* is attached, substantially as shown and described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANK HEIMANN.

Witnesses:
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