

C. FAY.

Improvement in Ash Sifters.

No. 123,987.

Patented Feb. 27, 1872.

Fig. 1.
Reduced.

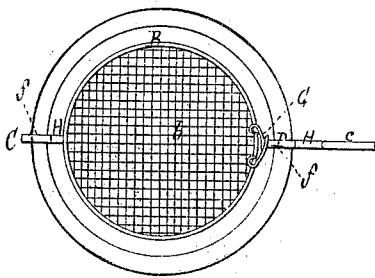


Fig. 3.

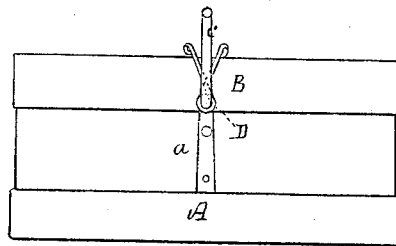
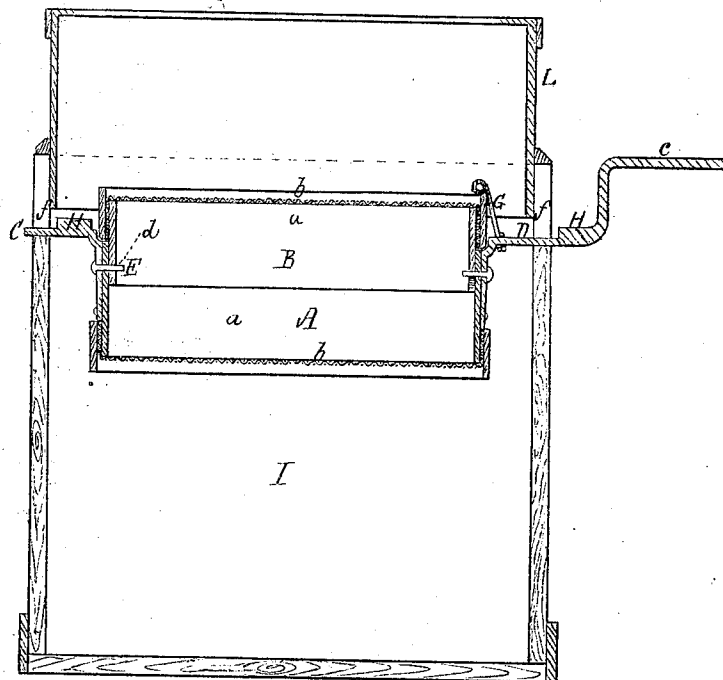


Fig. 2.



Witnesses,
W. C. Boardman,
S. W. Balcom

Christopher Fay,
by his attorney,
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UNITED STATES PATENT OFFICE.

CHRISTOPHER FAY, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN ASH-SIFTERS.

Specification forming part of Letters Patent No. 123,987, dated February 27, 1872.

To all to whom these presents shall come:

Be it known that I, CHRISTOPHER FAY, of Boston, in the county of Suffolk and State of Massachusetts, have made an invention of new and useful Improvement in Ash-Sifters; and I do hereby declare the following to be a full, clear, and exact description thereof, due reference being had to the accompanying drawing making part of this specification, and in which—

Figure 1 is a plan, and Fig. 2, a vertical section of my invention. Fig. 3 is a side elevation of the rotary screen removed from the barrel.

This sifter is to be used in connection with an ordinary barrel or other proper vessel, the only preparation of which for its reception is to cut a notch in each side of its upper edge, a suitable cover being combined with the barrel or receptacle, whereby the sifting sieve or screen is completely inclosed, and escape of ashes or dust prevented. This invention consists in the employment of a double sieve or screen, or two sieves fitting one within the other, or otherwise properly formed, to join them together when in use; one of such sieves being provided with a journal upon opposite sides, by means of which both may be rotated, and a crank for effecting such rotations; while upon each journal I form a rectangular block or stop, which, under certain conditions, enters the orifice in the top of the barrel, which is of a like form, and fills the same, thereby preventing rotation of the screen while ashes are being dumped into it; a secondary feature in the invention being a novel means of securing the two sieves together, which consists of a horizontal pin projecting from the inside of the outermost one, and extending into an orifice formed in the inner one; while, in combination with this pin and orifice, I apply to the opposite journal a clasp, to seize hold of the edge of the inner sieve, and clamp the two together.

The drawing accompanying this specification represents at A B two sieves, composed of a circular band, *a*, and a reticulated covering, *b*, substantially in the ordinary manner of producing such articles, the band of one being somewhat smaller than that of the other, in order to enter it with a close fit. Upon each of two opposite sides of the outermost sieve A, I apply a horizontal journal or shaft, C or D, one of which terminates in a crank, *c*, while both depart from the sieve at or near its upper edge,

in order that its gravity shall retain it right side up. E in the drawing represents a horizontal stud or pin, projecting inward from the inside of the band *a* of the sieve A, such pin extending a slot or orifice, *d*, formed in the band of the inner sieves, while to the opposite side of the exterior of the sieve A, or to the adjacent journal D, I swivel a clasp, G, as shown in Fig. 3, in which the two sieves are nested together, overlaps the inner one, and, in connection with the pin and slot before named, confines them securely together. In order that the sieve A may be maintained in a horizontal position, right side up, while ashes are being dumped into it, I form, upon one or both of the journals C D, a rectangular block or stop, H, which corresponds in size and shape with a notch, *f*, formed in the upper edge of the barrel or receptacle I, which is to receive the ashes sifted from the screen composed of the two sieves.

In the use of the above described ash-sifter, the sieve A is to be placed in the mouth of the barrel I, and to one side thereof, and with the rectangular portions of the journals C D extending into notches *f f*, the sieves being by this means maintained in a horizontal position, bottom down. Ashes are now dumped into the sieve A, and the sieve B inserted bottom up within it, and locked there by means of the pin E, slot *d*, and clasp G. The screen composed of the two sieves, united as explained, is now pushed into the center of the barrel, which removes the stops H H from the notches *f f*, and allows the attendant to rotate the said screen, a proper cover L being applied to the barrel to prevent escape of dust. Seizing the crank *c*, the attendant rotates the screen until the ashes are separated from the coal and fall to the bottom of the barrel, when the screen is removed, the two sieves separated, and the coal discharged from the inner one.

Claim.

The herein-described ash-screen or sifter, composed of the two sieves A B, combined together as specified, the journals C D, crank *c*, and stops H, the whole arranged to operate, in connection with a receptacle, I, provided with notches *f*, substantially as shown and set forth.

CHRISTOPHER FAY.

Witnesses:

FRED. CURTIS,
W. E. BOARDMAN.