(No Model.)

M. S. TAYLOR.

ASH SIFTER.

No. 343,347. Patented June 8, 1886.

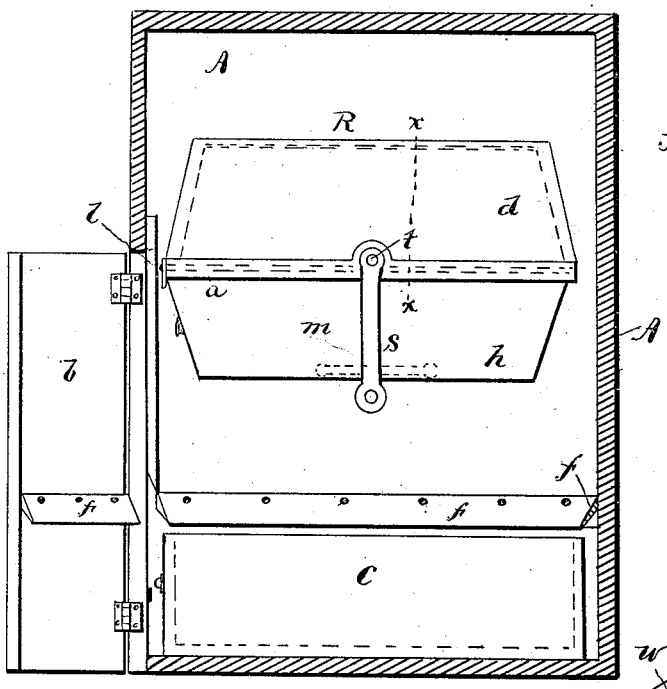

Fig. 1.

Fig. 2.

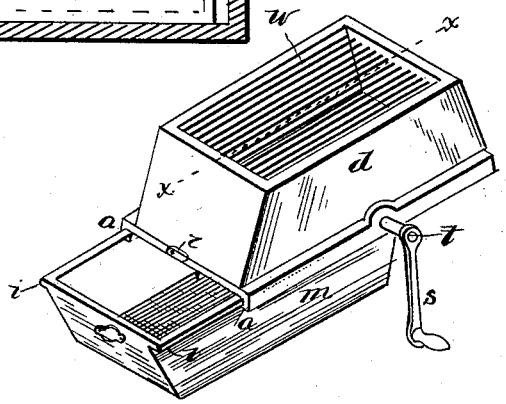

Fig. 3.

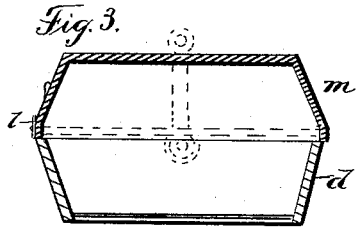

Fig. 4.

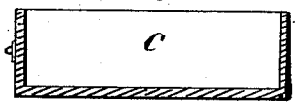

Fig. 5.

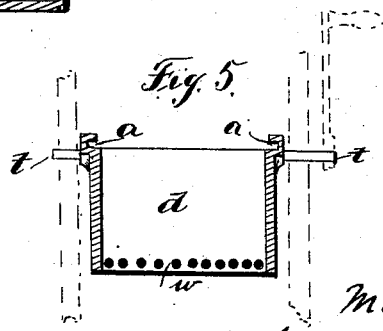

Fig. 6.

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ASH-SIFTER.

SPECIFICATION forming part of Letters Patent No. 343,347, dated June 8, 1886.

Application filed January 18, 1886. Serial No. 188,961. (No model.)

To all whom it may concern:

Be it known that I, MARTIN S. TAYLOR, a citizen of the United States, residing at Monson, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Ash-Sifters, of which the following is a specification.

This invention relates to improvements in that class of ash-sifters in which the ash-receptacle is adapted to be rotated within a suitable case for the purpose of shaking the ashes clear of the coal and cinders; and the invention consists in the peculiar construction and arrangement of parts, as hereinafter fully described, and pointed out in the claims.

In the drawings forming part of this specification, Figure 1 is a side elevation of an ash-sifter constructed according to my invention, the case thereof being shown in vertical section and a crank-catch being represented thereon in dotted lines. Fig. 2 is a perspective view of the grated portion of the ash-receptacle, one trunnion and its crank, and showing the ash-pan partly drawn away from said grated part. Fig. 3 is a longitudinal section of the ash-receptacle on the line *x x*, Fig. 2, but in a reversed position from that shown in that figure. Fig. 4 is a longitudinal section of the ash-drawer. Fig. 5 is a transverse section of the said grated portion of the ash-receptacle, taken to one side of its trunnions, showing portions of the sides of the case and the crank in dotted lines. Fig. 6 is a perspective view of the crank-catch shown in dotted lines in Fig. 1.

In the drawings, A is the case of the machine, constructed of wood, preferably closed on all but one side, and on the latter is hung a door, *b*, which tightly closes an opening in said case, which permits of introducing and removing the ash-drawer *c*, which is located in the bottom of the case, the sides of the latter and the door *b* being provided with inclined ash-chutes, *f*, secured thereto just above the borders of said drawer *c*, whereby the siftings which fall from the ash-receiver above are all directed into the drawer. Said door *b* is provided with a suitable fastening device for locking it when it is shut.

The ash-drawer *c* may be made of either wood or metal, and is provided with a handle on one end, as shown, whereby it is withdrawn from the case A.

The ash-receptacle above referred to consists of the box *d*, having a grated bottom, *w*, the latter consisting of a series of parallel rods, as shown, or of a coarse wire-cloth bottom, either one of which is adapted to serve the purpose of a sifter to separate the ashes from the coal, and of the ash-pan *m*, made preferably of metal, and having the lips *i* thereon projecting laterally from its sides, which engage in the grooves *a* formed on the opposite borders of said box *d*, whereby said pan may be slid into connection with the latter and drawn from under it. A button, *l*, on the end of box *d*, serves to lock the pan *m* to the box, and the latter is provided with two trunnions, *t*, one on either side, whereby it is suspended within the case A above the drawer *c*, said trunnions having suitable bearings in the sides of the case. A crank, *s*, is attached to the end of one of said trunnions outside of case A, whereby said ash-receptacle is given a rotary or a reciprocating rotary motion within the latter. A crank-catch, *z*, (shown in Fig. 6,) having a recess therein to receive the arm of the crank *s*, is attached to the outside of case A, under the latter, in the position indicated in dotted lines in Fig. 1. Said crank-catch is made of an elastic metal strip, and curves more or less outward from the side of case A, and is compressible by the action of the crank against its face, and springs outward when the crank is opposite said recess, and so engages the latter as to hold it rigidly and maintain the ash-receptacle in the position shown in Figs. 1 and 2—that is to say, with the box *d* uppermost and in a position to have the ash-pan *m* connected with it or withdrawn from it, and after it is so connected the crank is disconnected from the said catch *z* by depressing the latter, thereby allowing the crank to be turned to an upward position, as shown in dotted lines in Fig. 3, thereby turning said ash-receptacle so that the box *d* is brought under the pan *m*, and the contents of the latter are emptied into said box and onto its grated bottom. With the ash-receptacle in the position just described, and containing ashes to be sifted which were previously placed in the pan *m*, a

few vibratory motions given to the crank *s* serve to impart an oscillating or reciprocating rotary motion to the ash-receptacle, whereby the contents of the latter are moved back and forth over the grated bottom of box *d*, and the ashes they contain are quickly shaken out and drop into the drawer *c*, and during said sifting operation (the door *b* of the case A being closed) no dust whatever escapes from said case. After the sifting is completed the ash-receptacle is turned back to the position it occupied when the pan *m*, with the ashes therein, was attached to the box *d*, letting the sifted coal fall in a clean state into said pan, and the latter is then withdrawn and emptied, the crank *s* re-engaging with the catch *z*, and holding the ash-receptacle in a fixed position, as before.

What I claim as my invention is—

1. An ash-sifter consisting of the box *d*, having a grated bottom and grooved borders, and the trunnions *t* thereon, the ash-pan *m*, having laterally-projecting lips on its sides to engage with said grooved borders, means, substantially as described, for securing said pan to said box, and a crank, *s*, secured to one of said trunnions, and the case A, within which said box and pan are suspended by said trunnions, substantially as set forth.

2. An ash-sifter consisting of the case A, provided with the door *b*, and having on the latter and on the inner sides of said case the inclined chutes *f*, the ash-drawer *c*, the box *d*, having a grated bottom and grooved borders, and the trunnions *t* thereon, whereby said box is suspended within said case, a crank, *s*, attached to one of said trunnions, and the ash-pan *m*, having laterally-projecting lips on its sides to engage in said grooved borders of box *d*, substantially as set forth.

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