

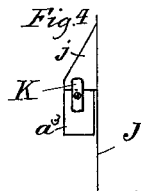
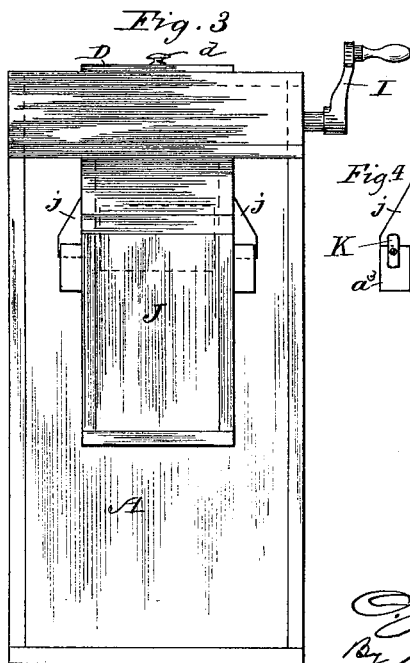
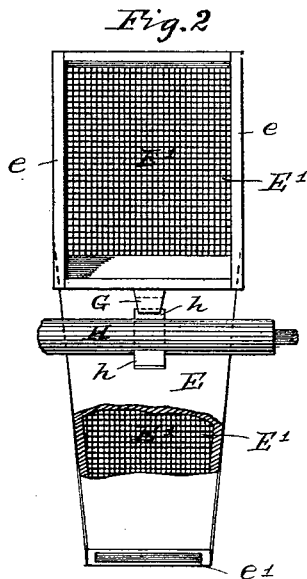
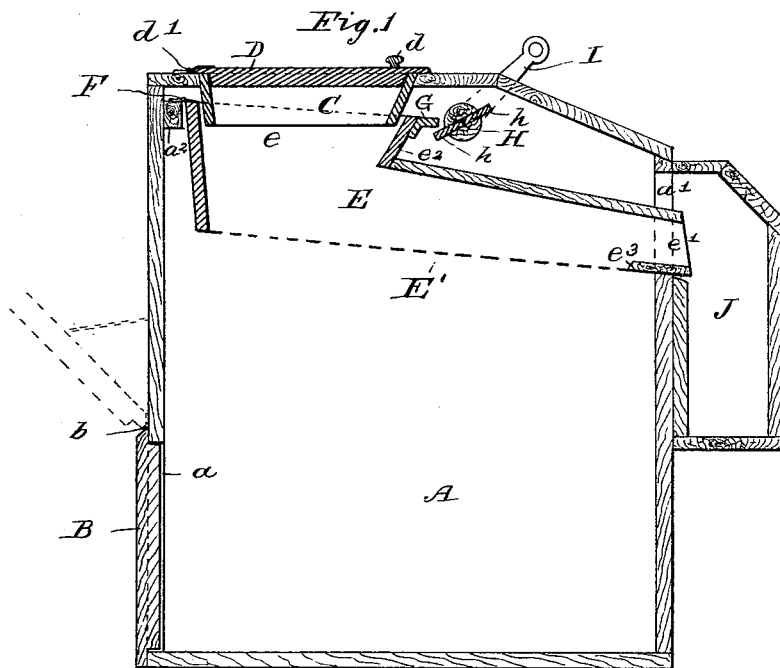
(No Model.)

O. J. BAGLEY.

ASH SIFTER.

No. 387,034.

Patented July 31, 1888.



Witnesses.
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UNITED STATES PATENT OFFICE.

ORLANDO J. BAGLEY, OF GREAT FALLS, NEW HAMPSHIRE.

ASH-SIFTER.

SPECIFICATION forming part of Letters Patent No. 387,034, dated July 31, 1888.

Application filed May 31, 1887. Serial No. 239,768. (No model.)

To all whom it may concern:

Be it known that I, ORLANDO J. BAGLEY, a citizen of the United States, residing at Great Falls, in the county of Strafford and State of New Hampshire, have invented certain new and useful Improvements in Ash-Sifters, of which the following is a specification.

The object of this invention is to provide a machine for separating the cinders from ashes by agitation, and these results are attained by the mechanism illustrated in the accompanying drawings, forming part of this specification, of which—

Figure 1 is a central vertical section of the machine complete, and Fig. 2 is a sectional plan view of the device, with the top of the casing removed and partly broken away to show the screen beyond the feed-spout. Fig. 3 shows the entire machine in end elevation, and Fig. 4 is a detail view.

Like reference-letters indicate like parts.

A is the ash-box, having an opening, *a*, at one end for removal of ashes. This may be provided with a suitable door, B, which may be detachable, or hinged at *b* to the said case A. This case may be constructed sufficiently large to accommodate the accumulation of ashes of an entire season, if desired, and thereby avoid the necessity of cleaning out during the winter. In the top of this case A is a shallow chute or hopper, C, which is provided with a cover, D, having a knob, *d*, by which it may be raised, and, if desired, this cover may be hinged at *d'*, so as to readily close after depositing ashes into the said chute. The said chute C empties into the sifting-box E at *e*, its mouth *e'* passing out through an opening, *a'*, in the ash-box A, which is formed sufficiently high or long vertically to allow the mouth of said sifting-screen the proper vertical movement up and down, to be hereinafter explained. The said sifting-box E is preferably hinged at F to the ash-box, or to a cleat, *a''*, provided for the purpose, and a short arm or lug, G, is firmly secured to the said sifting-box at *e''* to engage with the fingers *h*, projecting radially from the shaft H, said roll or shaft H being journaled on a horizontal plane within the ash-box A, over and transversely to the sifting-screen E.

A crank, I, is mounted upon one of the journals of the shaft H, by which said shaft is rotated, and to sift a hod of ashes, first open the cover D and dump the ashes into

the chute C. These fall directly into the sifting-box E, and are deposited upon the wire-screen E', which forms the only bottom for the said box E, with the exception of the sill-piece *e''*, which extends six inches, more or less, back from its mouth, the purpose of which will be hereinafter explained.

After closing the cover D the crank I is then turned in a direction to bring the fingers *h* of the shaft H successively under the lug G of the sifting-box, which operation jumps said box up and down, and as it is, when in its normal position, slightly inclined downward toward the opening *a'*, the coal or cinders are gradually worked out through the mouth *e'*, where they fall into the coal or cinder receiver J, while the ashes sift through the screen E' into the box A. The sill-piece *e''* slightly checks the discharge of cinders, and serves to finally clean or remove all ashes therefrom, as it is considerably higher than the screen, and the cinders must pass over it before falling into the cinder-receiver J. The latter may have a portion or the whole of its bottom removable for discharging its contents into a coal-hod placed underneath, or the said receiver J may be detachable, as shown in Figs. 3 and 4. The latter is probably the most preferable, consisting of the cleats *j j*, secured to the box J, the supports *a'' a''*, secured to the box A, upon which said cleats *j j* rest, and buttons K for holding the cleats *j j* in proper position.

Having described my improvements, what I claim, and desire to secure by Letters Patent, is—

In an ash-sifter, the combination, with the inclosed case A, having opening *a'*, of the hopper C, provided with a cover, the inclined sifter E, beneath the same, pivoted at one end in the casing and provided with the lip G and with the retarding and impact sill *e''* at its rear end, resting in opening *a'*, the shaft H above the sifter and having fingers for engaging said lip, and the closed receptacle J upon the side of the case having an opening at the top of its inner side for receiving the discharge of the sifter, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ORLANDO J. BAGLEY.

Witnesses:

J. B. THURSTON,
CHAS. G. REMICK.